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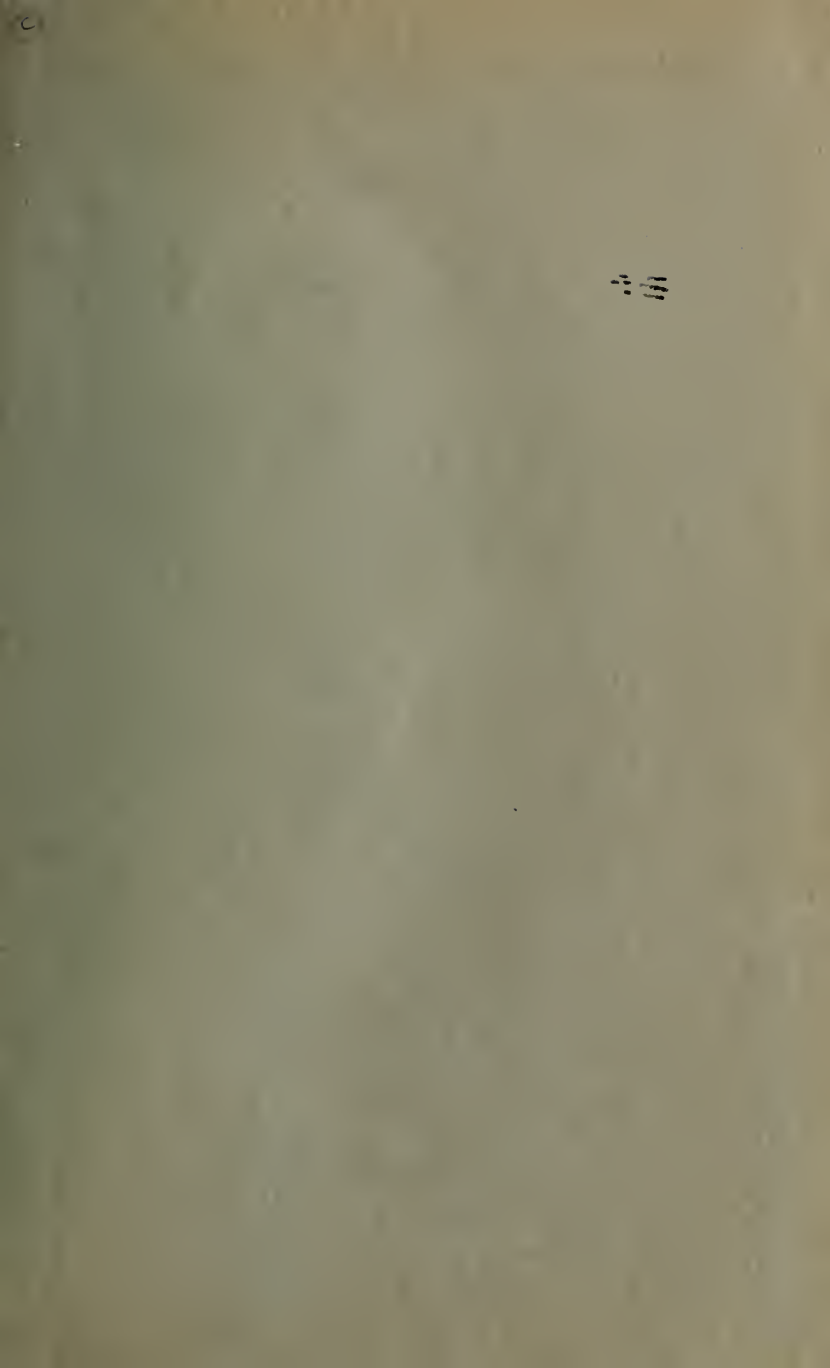
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Brigham Young University

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1945-46



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Vol. XLI

Provo, Utah

May 1, 1945

No. 4



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Annual Catalogue Issue 1945-46

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Provo, Utah**

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Organization of Brigham Young University

Brigham Young University as now organized comprises:

A College of Applied Science	A Graduate School
A College of Arts and Sciences	A Division of Religion
A College of Commerce	A Summer School
A College of Education	An Extension Division
A College of Fine Arts	A Research Division

Elementary and Secondary Training Schools are maintained in connection with the College of Education.

DEPARTMENTS OF INSTRUCTION

Accounting and Business Administration	Horticulture and Landscape Architecture
Agricultural Economics	Journalism
Agronomy	Library
Animal Husbandry	Marketing
Art	Mathematics
Bacteriology	Mechanic Arts
Bible and Modern Scripture	Modern and Classical Languages
Botany	Music
Chemistry	Philosophy of Education
Church History	Physical Education
Church Organization and Administration	Physics
Economics	Political Science
Educational Administration	Psychology
Elementary Education	Secondary Education
English	Secretarial Practice
Finance and Banking	Sociology
Geology and Geography	Speech
History	Theology and Religious Philosophy
Home Economics	Zoology and Entomology

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1945

JANUARY							FEBRUARY							MARCH							APRIL						
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1946

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29	30	27	28	29	30	31	24	25	26	27	28	29	30	29	30	31

1945

AUTUMN QUARTER

September 24—First Faculty Meeting.

September 28 and 29—Freshman instructions and examinations. All Freshmen must take placement tests on these days or incur a penalty of three dollars.

October 1 and 2—Registration days.

October 3—Instruction begins.

October 16—Founder's Day celebration

November 22 to 25—(Wednesday evening until Monday morning—Thanksgiving Recess.)

December 21—Friday evening—Autumn Quarter closes.

1946

WINTER QUARTER

January 7—Monday morning—Winter Quarter begins.

March 22—Winter Quarter closes.

SPRING QUARTER

March 25—Spring Quarter begins.

June 2—Baccalaureate Services.

June 4—Alumni Reunions.

June 5—Seventieth Commencement Exercises.

June 10—Summer Quarter begins.

School Officials

THE GENERAL BOARD OF EDUCATION

Of the Church of Jesus Christ of Latter-day Saints
(In charge of L. D. S. Junior and Senior Seminaries, Institutes,
Juarez Schools, Ricks College, L. D. S. Business College, and
Brigham Young University).

BOARD MEMBERS

GEORGE ALBERT SMITHPresident
J. REUBEN CLARK, JR.....First Vice-President
DAVID O. McKAY.....Second Vice-President

JOSEPH FIELDING SMITH	JOSEPH F. MERRILL
STEPHEN L. RICHARDS	CHARLES A. CALLIS
JOHN A. WIDTSOE	FRANKLIN L. WEST
ADAM S. BENNION	ALBERT E. BOWEN
FRANK EVANS, Secretary-Treasurer	

EXECUTIVE COMMITTEE OF GENERAL BOARD OF EDUCATION

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STEPHEN L. RICHARDS	CHARLES A. CALLIS
JOHN A. WIDTSOE	ALBERT E. BOWEN
FRANKLIN L. WEST	

THE COMMISSIONER OF EDUCATION

Executive Officer of the General Board
FRANKLIN L. WEST

THE BOARD OF TRUSTEES OF THE BRIGHAM YOUNG UNIVERSITY

The General Board also serves as the Board of Trustees, with
Kiefer B. Sauls as Secretary and Treasurer

EXECUTIVE COMMITTEE OF B. Y. U.

JOSEPH FIELDING SMITH	JOSEPH F. MERRILL
STEPHEN L. RICHARDS	CHARLES A. CALLIS
JOHN A. WIDTSOE	ALBERT E. BOWEN
HOWARD S. McDONALD	

PRESIDENT OF THE BRIGHAM YOUNG UNIVERSITY
HOWARD S. McDONALD

Faculty Administrative Officers

Howard S. McDonald	President
Anna Stucki	Secretary to President
Kiefer B. Sauls.....	Secretary-Treasurer
Carma Ballif.....	Associate in Treasurer's Office
John E. Hayes.....	Registrar
Lucile Spencer.....	Assistant in Registrar's Office
Christen Jensen.....	Dean of the Graduate School
Carl F. Eyring.....	Dean of the College of Arts and Sciences
Herald R. Clark.....	Dean of the College of Commerce
Gerrit de Jong, Jr.....	Dean of the College of Fine Arts
Thomas L. Martin.....	Dean of the College of Applied Science
J. Wyley Sessions.....	Director of Religious Activities
Gerrit de Jong, Jr.....	Acting Director of Extension Division
A. C. Lambert.....	Dean of the Summer Session
Elizabeth Hill.....	Assistant Dean of Women
Wesley P. Lloyd.....	Dean of Men
Golden L. Woolf.....	Principal Secondary Training School
Hermese Peterson.....	Principal Elementary Training School
Lloyd L. Cullimore.....	Medical Director
Eunice Brough	Nurse
Anna Ollorton.....	Librarian
W. H. Snell.....	Director of Engineering and Maintenance Service

DEANS' COUNCIL

The Deans' Council consists of the President, all deans, and the directors of the divisions.

UNIVERSITY COUNCIL

The University Council consists of the President and all members of the faculty with the rank of professor, associate professor, or assistant professor.

STANDING COMMITTEES

(The President is ex-officio member of all standing committees)

Admission and Credits. J. E. Hayes, W. B. Hales, C. L. Hayward.

Aiding Graduates to Obtain Employment. E. M. Jensen, H. V. Hoyt, the Deans.

Alumni Directory. F. R. Haymore, L. Spencer.

Athletics. A. S. Ballif, P. A. Christensen, J. W. Knight, C. J. Hart, K. B. Sauls, President of Student Body, Alumni Secretary, C. L. Jensen, Manager of Athletics, F. Millet.

STANDING COMMITTEES, Cont.

Attendance and Scholarship. J. K. Nicholes, J. W. Sessions, M. Billings.

Awards. T. E. Pardoe, F. Madsen, C. J. Hart, R. Andrus.

Campus. T. L. Martin, B. F. Harrison, B. F. Larsen, K. Miller, W. H. Snell.

Care of Girls' and Women's Activities. Dean of Women, H. Peterson, A. B. Hart, E. C. Carroll, E. Hill, E. Brough.

Catalogue and Other Quarterlies. K. E. Young, J. E. Hayes, K. B. Sauls, N. I. Butt, J. R. Clark, H. W. Lee.

Debating. H. T. Christensen, E. Miller, A. J. Morley.

Dormitories. H. V. Hoyt, E. Warnick, E. C. Carroll, E. Snow, W. P. Lloyd, H. R. Clark, E. Hill.

Eligibility. M. Marshall, J. H. Wing, J. E. Hayes.

Graduation. B. F. Cummings, J. Sudweeks, G. L. Woolf, E. M. Croft.

Lectures and Musicals. H. R. Clark, J. C. Swensen.

Library. M. W. Poulson, S. B. Sperry, A. S. Ballif, E. Snow, I. Osmond, Librarian.

Personnel. R. B. Swensen, W. P. Lloyd, A. C. Lambert, J. R. Gibb, H. T. Christensen.

Petitions. V. M. Tanner, R. Britsch, H. W. Peterson.

Public Relations. G. H. Hansen, G. de Jong, Jr., T. E. Pardoe, W. P. Lloyd.

Publicity. G. de Jong, Jr., K. B. Sauls, W. B. Hales, E. C. Carroll, F. R. Haymore, B. Harrison, A. J. Morley.

Radio. T. E. Pardoe, N. O. Geertsen, L. W. Booth, J. R. Clark III, R. L. Ungermann.

Schedule of Events. A. Stucki, G. de Jong, Jr., J. W. Sessions.

Schedule of Classes. R. B. Swensen, N. I. Butt, O. B. Tanner.

Scholarships. R. D. Law, Treasurer, Registrar.

Social Affairs. Dean of Men, Dean of Women, C. J. Hart, L. Holbrook, J. R. Halliday, E. Miller, R. B. Swensen, E. Hill.

Social units. Dean of Men, G. H. Hansen, G. de Jong Jr., J. W. Sessions, L. Holbrook, A. S. Ballif, Registrar, Dean of Women, Student Representatives.

Student Housing. B. F. Cummings, E. Hill, Dean of Women, W. E. Coffman, F. W. Dixon.

Student Aid and Employment. Dean of Men, Dean of Women, E. Hill, K. B. Sauls, H. V. Hoyt, F. R. Haymore.

Student Publications. J. R. Clark III, B. F. Larsen, N. Rich, F. R. Haymore, E. Hill.

University History. J. M. Jensen, B. Roberts, N. I. Butt, E. C. Carroll.

The Faculty

Howard S. McDonaldPresident

B. S., Utah State Agricultural College, 1921; M. A., University of California, 1925; Graduate work, University of California, 1925-44; Instructor, Utah State Agricultural College, 1921-24; Vice-Principal and Dean of Boys, Balboa High School, 1928-34; Director of Teaching Personnel, San Francisco Public Schools, 1934-36; Deputy Superintendent in Charge of Teaching Personnel, San Francisco Public Schools, 1936-44; Superintendent of Schools, Salt Lake City, 1944-45; President, Brigham Young University, 1945—.

John C. Swensen.....Professor Emeritus of Sociology

A. B., Stanford University, 1898; M. A. Columbia University, 1921; Graduate Work, Columbia University, Summer, 1924; Assistant Professor of English, Brigham Young University, 1898-99; Professor of History and Economics, 1899-1900; Dean, College of Education, 1921-24; Professor of Economics and Sociology, 1906-1941; Emeritus, 1941—.

Charles E. Maw.....Professor of Chemistry

A. B., Stanford University, 1903; M. S., University of Chicago, 1916; Ph. D., Stanford University, 1924; Graduate Work, Columbia University, 1916; University of California, 1923; Professor of Chemistry, Brigham Young University, 1903—

Christen Jensen.....Professor of History and Political Science; Dean, Graduate School

A. B., University of Utah, 1907; M. A., Harvard University, 1908; Ph. D., University of Chicago, 1921; Graduate Work, University of California; Study in Europe, 1928; Assistant Professor of History and Political Science, Brigham Young University, 1908-11; Professor, 1911—; Acting Dean College of Applied Science, 1924-29; Acting President, Brigham Young University, 1939-40; Dean, Graduate School, 1929—.

Amos N. Merrill.....Professor Emeritus of Secondary Education

B. S., Utah Agricultural College, 1896; M. S., University of Illinois, 1908; Ph. D., Stanford University, 1926; Graduate Work, Harvard University, and Travel in Europe, 1938; Exchange Professor in Education, University of Maine, 1940; Professor of Agriculture, Brigham Young College, 1905-09; Professor of Agriculture, Brigham Young University, 1909-22; Dean, Church Teachers' College, 1917-23; Professor of Secondary Education and Supervisor of Secondary Training, 1924; Acting Dean, College of Education, 1930-39; Dean, College of Education, 1939—45; Emeritus, 1945—.

Carl F. Eyring.....Professor of Physics and Mathematics;
Dean, College of Arts and Sciences

A. B., Brigham Young University, 1912; M. A., University of Wisconsin, 1915; Ph. D., California Institute of Technology, 1924; Assistant in Physics, University of Wisconsin, 1914-15; Assistant in Physics, California Institute of Technology, 1922-23; Acoustical Engineer, Bell Telephone Laboratories, 1929-31; Assistant in Physics, Brigham Young University, 1910-12; Instructor, 1912-14; Assistant Professor, 1915-17; Professor of Physics and Mathematics, 1917—Dean, College of Arts and Sciences, 1924—.

Vilate Elliott.....Professor Emeritus of Home Economics

B. Pd., Brigham Young University, 1895; Graduate Work Pratt Institute; Student, State Normal School, Santa Barbara, California; University of Chicago; Study in Europe, 1924-25; Floating University, 1930-31; Professor of Home Economics, Brigham Young University, 1908-39; Emeritus, 1939—.

Benjamin F. Cummings.....Professor of Modern and
Classical Languages

A. B., University of Utah, 1913; Graduate Work, University of Utah; University of Chicago; Stanford University, University of Paris; Instructor in Modern Languages, Latter-day Saints University, 1910-12; 1914-20; Instructor in Modern Languages, University of Utah, 1913-14; Professor of Modern and Classical Languages, Brigham Young University, 1920—.

Florence Jepperson Madsen.....Professor of Music

B. M., Chicago Musical College, 1926; M. M., 1927; Doctor of Music, Boguslawski College of Music, 1932; A. B. Brigham Young University, 1934; Graduate Work in Music, New England Conservatory of Music; Honorary Doctor of Music, Chicago College of Music, 1933; Director, Vocal Department, Lasalle Seminary, Boston, 1911-16; Instructor in Vocal Art, L. D. S. School of Music and Weber College, 1916-18; Instructor in Music, Chicago Musical College, Summers, 1927-41; Brigham Young University, 1910-11; 1916-18; Professor of Music, 1920—.

Thomas L. Martin.....Professor of Agronomy and Bacteriology,
Dean, College of Applied Science

A. B., Brigham Young University, 1912; Ph. D., Cornell University, 1919; Study in Europe, 1930; Principal, Big Horn Academy, 1912-15; Emery Stake Academy, 1916-17; Millard Academy, 1919-21; Instructor in Soils, Cornell University, 1917-19; Professor of Agronomy, Brigham Young University, 1921-35; Professor of Agronomy and Bacteriology, 1935—; Dean, College of Applied Science, 1937—.

William J. Snow.....Professor Emeritus of History

A. B., Brigham Young University, 1919; Ph. D., University of California, 1923; Principal, Uintah Stake Academy, 1906-08; Instructor in History, Brigham Young University, 1910-15; Assistant Professor of History, 1915-17; Professor, 1917-41; Emeritus, 1941—.

T. Earl Pardoe.....Professor of Speech

Graduate, Leland Powers School, 1913; A. B., Brigham Young University, 1925; M. A., University of Southern California, 1932; Graduate Work, Columbia University; Speech Correction, University of Southern California; Ph. D., University of Louisiana, 1936; Head, Department of Dramatic Art and Public Speaking, Weber Normal College, 1915-18; Associate Professor of Public Speaking and Dramatic Art, Brigham Young University, 1920-22; Professor of Speech, 1922—.

M. Wilford Poulson.....Professor of Psychology

A. B., Brigham Young University, 1914; M. A., University of Utah, 1919; Graduate Work, University of Chicago; University of California; Stanford University; Instructor in Education, Brigham Young University, 1910-16; Assistant Professor of Education, Brigham Young University, 1916-19; Associate Professor of Education, 1919-22; Associate Professor of Psychology, 1922-23; Professor, 1923—.

Vasco M. Tanner.....Professor of Zoology and Entomology

A. B., Brigham Young University, 1915; M. A., University of Utah, 1920; Ph. D., Stanford University, 1925; Head, Department of Biology, Dixie College, 1916-18; 1920-24; Professor of Zoology and Entomology, Brigham Young University, 1925—.

**Herald R. Clark.....Professor of Finance and Banking
Dean, College of Commerce**

A. B., Brigham Young University, 1918; M. B. A., University of Washington, 1924; Graduate Work, Ohio State University; Instructor in Accounting, Brigham Young University, 1917-27; Associate Professor of Finance and Banking, 1917-27; Associate Professor of Finance and Banking, 1927-28; Professor, 1928—; Dean, College of Commerce, 1934—.

Parley A. Christensen.....Professor of English

B. S., Utah State Agricultural College, 1914; M. A., Stanford University, 1925; Ph. D., Stanford University, 1927; Assistant Professor of English, Brigham Young College, 1917-25; Professor of English, Brigham Young College, 1925-26; Associate Professor, Brigham Young University, 1927-28; Professor, 1928—.

**Gerrit de Jong, Jr.....Professor of Modern Languages;
Dean, College of Fine Arts**

A. B., University of Utah, 1920; M. A., 1925; Ph. D., Stanford University 1934; Graduate Work, National University of Mexico; University of Munich; Stanford University; Instructor Murdock Academy, 1916-18; Instructor, Latter-day Saints University, 1919-25; Associate Professor of Modern Languages, Brigham Young University, 1925-29; Professor, 1929—; Dean, College of Fine Arts, Brigham Young University, 1925—.

George H. Hansen.....Professor of Geology and Geography

B. S., Utah Agricultural College, 1918; M. S., George Washington University, 1925; Ph. D., George Washington University, 1927; Field Work with U. S. Geological Survey, Summers, 1918, 1925, 1926, in Utah, Colorado, and New Mexico; California Institute of Technology, 1939; Assistant Professor of Geology and Geography, Brigham Young University, 1927-29; Professor, 1929—.

Harrison Val Hoyt.....Professor of Accounting and Business Administration

B. S. (Engineering), Purdue University, 1913; M. B. A., Harvard University, 1917; Ph. D., Stanford University, 1931; Professor of Accounting and Business Administration, and Dean, College of Commerce, Brigham Young University, 1921-31; Dean, Oregon State College of Commerce, 1931-32; Dean and Director, University of Oregon School of Business Administration and Commerce Work, Oregon State College, 1932-36; Professor of Accounting and Business Administration, Brigham Young University, 1937—.

Elmer Miller.....Professor of Economics

A. B., Stanford University, 1914; Graduate Work, Stanford University; University of Chicago; University of California; Harvard University, 1942-43; Instructor Dixie Normal College, 1911-12; Superintendent, Alpine School District, 1922-25; Associate Professor of Economics, Brigham Young University, 1923-29; Professor, 1930—.

Milton Marshall.....Professor of Physics

A. B., Brigham Young University, 1918; Ph. D., University of Chicago, 1924; Instructor in Physics, Brigham Young University, 1919-21; Assistant Professor of Physics, 1924-27; Associate Professor, 1927-30; Professor, 1930—.

Bent F. Larsen.....Professor of Art

A. B., Brigham Young University, 1912; M. A., University of Utah, 1922; Graduate Work, University of Chicago, Art Institute of Chicago, Academie Julian, Paris, Academie Colarossi, Paris, Academie de La Grande, Chaumiere, Paris, Student in Europe for sixteen months, 1929-30, with George Elmer Brown Art Group and in Academie Andre L'Hote; Supervisor of Art, B. Y. U. Training School, 1908-12; Associate Professor of Art, 1912-31; Professor, 1931—.

Leroy J. Robertson.....Professor of Music

Graduate, New England Conservatory of Music, 1923; A. B., Brigham Young University, 1932; M. A., Brigham Young University, 1932; Study in Europe, 1932-33; Instructor in Music, Brigham Young University, 1924-26; Assistant Professor of Music, 1926-27; Associate Professor, 1927-31; Professor, 1931—.

Franklin Madsen.....Professor of Music

A. B., Brigham Young University, 1925; M. A., Brigham Young University, 1931; Graduate Diploma, Chicago Musical College, 1925; Teachers' Certificate in Vocal Art and Singing, 1927; B. M., 1926; M. M., 1927; B. M. E., 1928; Mus. Doc., 1929; M. M. E. (Master of Music Education), 1932; Study in private studios in Europe, 1923; Honorary Doctor of Music Education, Boguslawski College of Music, 1933; Honorary Doctor of Music Education, Chicago College of Music, 1934; Instructor, Chicago Musical College, Summers, 1927-41; and Winter, 1927-28; Instructor in Music, Brigham Young University, 1920-24; Assistant Professor of Music, 1924-30; Associate Professor, 1930-31; Professor, 1931—.

Asael C. Lambert.....Professor of Educational Administration,
Dean of Summer Session

B. S., Brigham Young University, 1925; M. S., 1926; Ph. D., Stanford University, 1935; Superintendent of Public Instruction, Fremont County, Idaho, 1923-24; Instructor, Brigham Young University, 1924-27; Principal, University High School, 1926-28; Assistant Professor of Secondary Teaching, 1927-32; Associate Professor, 1932-34; Professor of Educational Administration, 1934—; Dean, Brigham Young University Summer Session, 1937—.

Effie Warnick.....Professor of Home Economics

B. S., Utah State Agricultural College, 1914; M. S., Iowa State College, 1937; Graduate Work, Columbia University, University of California, University of Chicago, Iowa State College; Instructor, Branch Agricultural College, 1914-15; Instructor of Foods and Nutrition, Brigham Young University, 1922-23; in Household Administration, 1923-27; Assistant Professor of Home Economics, 1927-30; Associate Professor, 1930-35; Professor, 1935—.

J. Marinus Jensen.....Professor Emeritus of English

A. B., Brigham Young University, 1912; M. A., University of Chicago, 1919; Graduate Work, University of California, Stanford University, Columbia University; Instructor in English, Brigham Young University, 1910-19; Assistant Professor of English, 1919-21; Associate Professor, 1921-36; Professor, 1936-41; Emeritus, 1941—.

George Stewart.....Special Professor of Agronomy

B. S., Utah State Agricultural College, 1913; M. S., Cornell University, 1918; Ph. D., University of Minnesota, 1926; Professor of Agronomy, Utah State Agricultural College 1919-30; Senior Ecologist, Branch Research, U. S. Forest Service, 1930—; Special Professor of Agronomy, Brigham Young University, 1932—.

Lloyd L. Cullimore.....Medical Director

B. S., University of Utah, 1922 M. D., George Washington Medical College, 1925; Instructor in Physiology, George Washington Medical College, 1925-26; Fellow of the American College of Physicians, 1942; Instructor in Health Education, Brigham Young University, 1927; Assistant Medical Director, 1928-29; Medical Director, 1929—.

Hermese Peterson.....Professor of Elementary Education,
Principal of Elementary Training School

B. S., Brigham Young University, 1928; Graduate Work, Brigham Young College, Utah State Agricultural College, Columbia University, University of Utah, University of California, University of Chicago; Primary Supervisor, Alpine School District, 1908-12; Study in Europe, 1928; Critic Teacher, Brigham Young University Training School, 1912-20; Primary Supervisor, 1920-23; Assistant Professor of Elementary Teaching, 1923-35; Associate Professor 1935-36; Professor of Elementary Education, 1936—.

William H. BoyleProfessor Emeritus of Education

A. B., Brigham Young University, 1913; M. A., 1923; Graduate Work, University of California, University of Southern California; Principal, Brigham Young University High School, 1910-26; Assistant Professor of Elementary Education, 1923-35; Associate Professor, 1935-36; Professor of Education, 1936-45; Emeritus 1945—.

Charles J. Hart.....Professor of Physical Education
and Athletics

B. S., Utah State Agricultural College, 1922; M. A., New York University, 1932; Graduate Work, Utah State Agricultural College, University of Wisconsin, New York University 1940-41-44; Instructor, Teton High School, 1923-25; Instructor in Physical Education and Athletics, Brigham Young University, 1925-27; Assistant Professor, 1927-37; Associate Professor of Physical Education, 1937-38; Professor, 1938—.

Wayne B. Hales.....Professor of Physics and Mathematics

A. B., Brigham Young University, 1916; M. A., University of Utah, 1922; Ph. D., California Institute of Technology, 1926; Instructor in Physics: Ricks College, 1916-21; President, Snow College, 1921-24; Professor of Physics, Weber College, 1926-30; Associate Professor of Physics, Brigham Young University, 1930-38; Professor of Physics and Mathematics, 1938—.

H. Grant Ivins.....Professor of Animal Husbandry

B. S., Utah State Agricultural College, 1917; Graduate Work, University of Wisconsin, U. S. Dept. of Agriculture, University of Maryland; Instructor in Animal Husbandry, Brigham Young University, 1929-31; Assistant Professor of Animal Husbandry, 1931-37; Associate Professor, 1937-38; Professor, 1938—.

Bertrand F. Harrison.....Professor of Botany

B. S., Brigham Young University, 1930; M. S., Brigham Young University, 1931; Ph. D., University of Chicago, 1937; Graduate Assistant in Botany, University of Chicago, 1936-37; Assistant in Botany, Brigham Young University, 1929-31; Instructor in Botany, 1931-35; Assistant Professor of Botany, 1935-37; Associate Professor, 1937-38; Professor, 1938—.

Clarence S. Boyle.....Professor of Accounting
and Business Administration

B. S., Brigham Young University, 1924; M. S., New York University, 1926; Ed. D., New York University 1941; Instructor, Driggs High School, Idaho, 1917-18; Instructor, Ricks College 1918-19; Head of Commercial Department, Provo High School, 1920-24; Instructor, Merchants' and Bankers' Business College, New York City, 1924-25; Instructor, Mount Vernon High School, N. Y., 1925-26; Instructor, Packard Commercial School, N. Y. C., 1936-38; Instructor, Rutgers University, University College, 1937-41; Associate Professor of Accounting and Business Administration, Brigham Young University, 1927-39; Professor, 1939—.

Sidney B. Sperry.....Professor of Religious Education

A. B., University of Utah, 1917; M. A., University of Chicago, 1926; Ph. D., University of Chicago, 1931; Graduate Work, American School of Oriental Research, Jerusalem, Palestine; Principal L. D. S. Seminary system 1922-28; Director, L. D. S. Institute, Moscow, Idaho, 1929-31; Associate Professor of Religious Education, Brigham Young University, 1932-39; Professor, 1939—.

Wesley P. Lloyd.....Professor of Philosophy of Education;
Dean of Men

B. S., Brigham Young University, 1927; M. S., Brigham Young University, 1934; Ph. D., University of Chicago, 1937; Instructor in Social Sciences, Edmunds High School, 1927-29; Principal, 1929-30; Principal, L. D. S. Seminary, Grace, Idaho, 1930-31; Principal, L. D. S. Seminary, Oakley, Idaho, 1931-34; Research Fellow, University of Chicago, 1936-37; Instructor in Education, Brigham Young University, Summer, 1935; Assistant Professor of Philosophy of Education, 1937-38; Associate Professor and Dean of Men, 1938-39; Professor, 1939—.

James Wyle Sessions.....Professor of Religious Education;
Director of Religious Activities

B. S., Utah State Agricultural College, 1911; M. A., University of Idaho, 1928; Professor of Agriculture, University of Idaho, Southern Branch, 1912-17; Extension Division, University of Idaho, 1917-19; President, South African Mission, 1920-26; Director, L. D. S. Institute, University of Idaho, 1927-30; University of Idaho, Southern Branch, 1930-35; University of Wyoming, 1935-36; Director, Missionary Training School, Salt Lake City, 1936-38; Professor of Religion, L. D. S. Institute, Logan, Utah, 1938-39; Professor of Religious Education and Director of Religious Activities Brigham Young University, 1939—.

**William H. Snell.....Professor of Mechanic Arts; Director of
Engineering and Maintenance Service**

A. B., Brigham Young University, 1918; M. S.; Brigham Young University, 1939; Special Work, Bradley Polytechnic Institute, and School of Architecture, University of Southern California; Instructor in English, Brigham Young University, 1915-17; Instructor in Woodwork, 1916-21; Assistant Professor of Mechanic Arts, 1921-36; Associate Professor, 1936-39; Professor, 1939—.

Joseph K. Nicholes.....Professor of Chemistry

A. B., Brigham Young University, 1916; M. A., Stanford University, 1924; Graduate Work, University of Chicago, Summer, 1933, and Stanford University, Summers, 1934-36; President, Dixie College, 1919-23 and 1926-33; Assistant Professor of Chemistry, Brigham Young University, 1933-36; Associate Professor, 1936-41; Professor, 1941—.

Reuben D. Law.....Professor of Elementary Education

B. S., Utah State Agricultural College, 1928; M. S., Utah State Agricultural College, 1933; Ed. D., University of Southern California, 1941; Superintendent of Schools, Rich County School District, 1929-35; Instructor in Education, Utah State Agricultural College, Summer, 1933; Superintendent of Schools, Duchesne County School District, 1935-36; Visiting Professor of Education, University of Southern California, Summers, 1940 and 1942; State Director of School-Community Relations and Libraries, Utah State Department of Public Instruction 1940-41; Professor of Education, Summer School of Education, Victoria, B. C., Canada, 1943; Assistant Professor of Elementary Education, Brigham Young University, 1936-38; Associate Professor, 1938-42; Professor, 1942—.

**Edwin R. Kimball.....Professor of Physical
Education and Director of Athletics**

B. S., Brigham Young University, 1926, M. S., University of Southern California, 1935; Instructor in Physical Education and Athletics, Millard County High School, 1926-27; Instructor in Mathematics and Athletic Director, Grand County High School, 1927-30; Instructor in Physical Education and Athletics, Jordan High School, 1931-35; Instructor in Physical Education and Athletics, Brigham Young University, 1935-37; Assistant Professor and Coach, 1937-38; Associate Professor and Director of Athletics, 1938-42; Professor, 1942—.

**Golden L. Woolf.....Professor of Secondary Education;
Principal, University High School**

A. B., Brigham Young University, 1934; M. A., Brigham Young University, 1936; Ed. D., University of California,

1940; Graduate Work, University of California, 1938-39; Instructor in Languages, Brigham Young University, 1934-35; Instructor in Secondary Education, 1935-37; Assistant Professor of Secondary Education, 1937-39; Principal, University High School, 1935; Associate Professor, 1939-42; Professor, 1942—.

Leona Holbrook.....Professor of Physical Education for Women

B. S., University of Utah, 1929; M. A., Columbia University, 1935; Graduate Work, University of Utah, Columbia University New School for Social Research, New York; Instructor and Playground Director, Salt Lake City; Civic Center Director, Kaysville, Utah; M. I. A. Summer Camp Recreation Director; Federal Experimental Camp Recreation Director; Associate Camp Director, Y. W. C. A., New York City; Instructor in Physical Education, Brigham Young University, 1937-38; Assistant Professor of Physical Education for Women, 1938-41; Associate Professor, 1941-42; Professor, 1942—.

Harold T. Christensen.....Professor of Sociology

B. S., Brigham Young University, 1935; M. S., Brigham Young University, 1937; Ph. D., University of Wisconsin, 1941; Graduate Work, University of California, at Los Angeles, 1937; Assistant in Sociology, Brigham Young University, 1935-36; Instructor, Brigham Young University, 1936-39; Assistant Professor, 1939-42; Associate Professor, 1942-43; Professor, 1943—.

Ed. M. Rowe.....Professor of English

A. B., Brigham Young University, 1923; Graduate Work, Utah State Agricultural College, Brigham Young University, University of Chicago, University of Wales, 1931-33; Cornell University, 1940; Superintendent, Spanish Fork Schools, and Principal, Spanish Fork High School, 1907-11; Instructor in English, Brigham Young University, 1924-27; Assistant Professor of English, 1927-35; Associate Professor, 1936-43; Professor, 1943—.

Karl E. Young.....Professor of English

B. S., Utah State Agricultural College, 1924; B. A., Oxford University 1930; M. A., Oxford University, 1934; Graduate Work, Harvard University, 1924-25; Certificate, University of Toulouse, Summer, 1929; Instructor in English, Brigham Young University, 1930-31; Assistant Professor of English, 1932-37; Associate Professor, 1937-43; Professor, 1943—.

Alonzo J. Morley.....Professor of Speech

A. B., Brigham Young University, 1925; M. A., Brigham Young University, 1931; Ph. D., University of Iowa, 1935; Teacher of Public Speaking and Dramatic Art, Uintah County High School, 1925-26; Head of Speech Department, Weber County High School, 1926-27; Instructor in Speech, Brigham Young University, 1928-30; Assistant Professor of Speech, 1930-35; Associate Professor, 1935-44; Professor, 1944—.

Russel B. SwensenProfessor of Religious Education

A. B., Brigham Young University, 1926; M. A., University of Chicago, 1931; Ph. D., University of Chicago, 1934; Principal L. D. S. Seminary system 1926-30; Assistant Professor of Religious Education, Brigham Young University, 1933-39; Associate Professor, 1939-44; Professor, 1944—.

Edgar M. JensonProfessor of Education;
Director, Teacher Placement

A. B., Brigham Young University, 1916; M. A., Brigham Young University, 1919; Graduate Work, Stanford University; Head, Education Department, Dixie College, 1919-23; President, Dixie College, 1923-26; Instructor, Brigham Young University, 1927-28; Assistant Professor of Educational Administration, and Principal, University High School, 1928-35; Director of Training Schools, 1930; Assistant Professor of Education, 1928-42; Associate Professor, 1942-44; Professor, 1944—.

Ariel S. BallifProfessor of Sociology

B. S., Brigham Young University, 1925; M. A., University of Southern California, 1937; Graduate Work, University of Southern California, 1936-37; Teaching Fellow in Sociology, University of Southern California, 1937-38; University of Southern California, Summer, 1942; Instructor in Social Science, Madison High School, 1925-26 Principal, Maori Agricultural College, Hastings, New Zealand, 1927-30; Principal Midway Seminary, 1931-36; Instructor in Sociology, Brigham Young University, 1938-39; Assistant Professor of Sociology, 1939-43; Associate Professor, 1943-44; Professor, 1944—.

Joseph SudweeksAssociate Professor of
Educational Administration

B. S., University of Idaho, 1912; M. A., University of Chicago, 1920; Ph. D., University of Wisconsin, 1925; Instructor and Supervisor of Training, U. S. Veterans' Bureau, University of Idaho, 1920-23; Assistant in Department of Education, University of Idaho, 1920-21; Assistant Professor of Educational Administration, Brigham Young University, 1925-27; Associate Professor, 1927—.

Madison W. MerrillAssociate in Medical Department

D. M. D., North Pacific Dental College, 1923; Special Work in Extractions and Oral Surgery at Mayo Clinic Dental Department, Summers, 1931 and 1936, and Special Work in Orthodontia, Denver, 1937; Associate in Medical Department, Brigham Young University, 1938—.

Philemon M. KellyAssociate in Medical Department

M. D., Northwestern University, Medical School, 1909; Graduate Work in Pediatrics and Internal Medicine, University of California, 1920-21; Mayo Clinic, Rochester, 1918, 1929; Study in Vienna, 1938; Associate in Medical Department, Brigham Young University, 1939—.

A. Smith Pond.....Associate Professor of Economics

A. B., University of Utah, 1926; Ph. D., Northwestern University, 1942; Research Associate, Illinois State Tax Commission, 1936-37; Instructor in Economics, Brigham Young University, 1937-39; Assistant Professor of Economics, 1939-43; Associate Professor, 1943—.

Thomas L. Broadbent.....Associate Professor of German

A. B., Brigham Young University, 1936; M. A., Brigham Young University, 1937; Ph. D., University of Michigan, 1942. Assistant in German, Brigham Young University, 1934-36; Instructor in German, Brigham Young University, 1936-41; Assistant Professor of German, 1941-43; Associate Professor, 1943—.

**Dean A. Anderson.....Associate Professor of
Agronomy and Bacteriology**

B. S., Brigham Young University, 1929; M. S., Iowa State College, 1930; Ph. D., Iowa State College, 1932; Research Fellow, Iowa State College, 1932-33; Instructor, Weber College, 1933-41; Assistant Professor of Agronomy and Bacteriology, Brigham Young University, 1941-43; Associate Professor, 1943—.

Loren C. Bryner.....Associate Professor of Chemistry

B. S., Brigham Young University, 1928; M. S., Brigham Young University, 1930; Ph. D., Iowa State College, 1934; Assistant in Chemistry, Brigham Young University, 1928-30; Graduate Assistant in Chemistry, Iowa State College, 1930-35; Research Fellow, Iowa State College, Summers, 1931 and 1932; Assistant Professor of Chemistry, Brigham Young University, 1935-44; Associate Professor 1944—.

Elsie C. Carroll.....Associate Professor of English

B. S., Brigham Young University, 1926; M. A., Brigham Young University, 1928; Student, Cornell University, University of Chicago, Stanford University; Columbia University, 1934; Graduate Work, University of Minnesota, 1938; Head of English Department, Kanab High School, 1917-18; Provo High School, 1919-20; Instructor in English, Brigham Young University, 1926-36; Assistant Professor of English; 1936-44; Associate Professor, 1944—.

Hugh W. Peterson.....Associate Professor of Chemistry

A. B., Brigham Young University, 1916; M. A., Brigham Young University, 1928; Ph. D., University of Iowa, 1936; Graduate Work, University of Utah, 1917; Utah State Agricultural College, Summer, 1924; Instructor, Big Horn Academy, 1917-18; Latter-day Saints University, 1918-19; Wasatch High School, 1919-20; Provo High School, 1920-27; Instructor in Chemistry, Brigham Young University, 1927-36; Assistant Professor of Chemistry, 1936-44; Associate Professor, 1944—.

Irene S. Barlow.....Associate Professor of Home Economics

B. S., Utah State Agricultural College, 1919; M. S., University of Chicago, 1934; Graduate Work, University of Chicago, Iowa State College, 1940-41; Instructor in Home Economics, Brigham Young University, 1934-36; Assistant Professor of Home Economics, 1936-44; Associate Professor, 1944—.

W. Elmo Coffman.....Associate Professor of Geography

B. S., Utah State Agricultural College, 1920; M. S., Brigham Young University, 1932; Ph. D., Ohio State University, 1944; Instructor, Payson High School, 1921-28; Principal, Minersville High School, 1928-29; Graduate Assistant in Geography, Ohio State University, 1935-36; Instructor in Geography, Brigham Young University, 1929-38; Assistant Professor, 1938-44; Associate Professor, 1944—.

C. Lynn Hayward.....Associate Professor of Zoology

B. S., Brigham Young University, 1927; M. S., Brigham Young University, 1931; Ph. D., University of Illinois, 1941 Graduate Work, University of California, 1935; University of Illinois, 1938-39; Instructor, Fielding High School, 1927-30; Assistant in Zoology, Brigham Young University, 1930-31; Instructor, 1931-39; Assistant Professor of Zoology, 1939-44; Associate Professor, 1944—.

John R. Halliday.....Associate Professor of Music

A. B., Brigham Young University, 1935; M. A., Brigham Young University, 1936; Ph. D., Music Theory, Eastman School of Music, University of Rochester, N. Y., 1941; Student, State Academy of Music in Berlin, 1933-34; Instructor, Brigham Young University, 1936-39; Assistant Professor of Music, 1939-44; Associate Professor, 1944—.

Irene Osmond.....Associate Professor of Modern Languages

A. B., Brigham Young University, 1929; M. A., Stanford University, 1934; Ph. D., Stanford University, 1942; Instructor in Modern Languages, Jordan High School, 1929-33; Instructor, Brigham Young University, 1936-42; Assistant Professor, 1942-45; Associate Professor, 1945—.

Edna Snow.....Associate Professor of Botany

California and Columbia University; Ph. D., University of Chicago, 1945; Instructor in Science, Brigham Young University High School, 1929-36; Instructor in Botany, 1937-39; Assistant Professor of Botany, 1939-45; Associate Professor 1945—.

John E. Hayes.....Registrar

B. S., Brigham Young University, 1924; Instructor, Brigham Young University, 1903; Registrar, 1904—.

Anna Ollorton.....Librarian

A. B., Brigham Young University, 1913; Graduate Work, University of Chicago, University of Utah, Chautauqua Summer School, Columbia University; University of California, 1938; Assistant Librarian, Brigham Young University, 1919-23; Acting Librarian, 1923-31; Librarian, 1931—.

Kiefer B. Sauls.....Secretary-Treasurer, Board of Trustees

B. S., Utah State Agricultural College, 1920; Graduate Work, Utah State Agricultural College; Secretary to Director, Utah Agricultural Experiment Station, 1917-21; Secretary to President and Purchasing Agent, Brigham Young University, 1921-39; Secretary-Treasurer, Board of Trustees, 1939—.

Newbern I. Butt.....Library and Research Associate

B. S., Utah State Agricultural College, 1915; M. S., Brigham Young University, 1939; Graduate Work, Columbia University, 1939; University of Chicago, 1941; Assistant Agronomist, Utah State Agricultural College, 1915-18; Library and Research Assistant, Brigham Young University, 1922-39; Library and Research Associate, 1940—.

Ella Larsen Brown.....Associate Librarian Emeritus

Student, Cook County Normal School; Columbia University; Primary Supervisor, Utah County Schools, 1900-02; Director, Brigham Young University Training School, 1902-08; Assistant Librarian, Brigham Young University, 1923-41; Emeritus, 1941—.

William F. Hanson.....Assistant Professor of Music

B. S., Brigham Young University, 1936; M. S., Brigham Young University, 1937; Teacher's Certificate, Chicago Musical College, 1924; Private Work with Xaver Schaswenka, Maurice Aromson, Felix Borowski, Dr. Carl Busch and H. B. Maxyott, 1924; Graduate Work, New York City, 1931-32; 1938-39; Supervisor, High School Music, Vernal, 13 years; Supervisor, Public School Music, Brigham Young University, 1924-25; Instructor in Music, 1926-31; Assistant Professor of Music, 1931—.

Billie Hollingshead.....Assistant Professor of Home Economics

A. B., Texas State College for Women, 1922; M. A., Brigham Young University, 1929; Ph. D., University of Southern California, 1935; Graduate Work, George Washington University, 1940-41; Instructor, Valdez High School, Valdez, Alaska, 1922-23; Instructor Star Valley High School

1924-26; Instructor, High School, Kohala, Hawaii, 1927-28; Instructor, Brigham Young University High School, 1929-36; Assistant Professor of Education, 1936-42; Assistant Professor of Home Economics, 1942—.

Stella P. Rich.....Assistant Professor of English

B. S., Brigham Young University, 1926; Study and Foreign Travel, 1935; Instructor, Public Schools of Utah and Idaho, 1911-27; Student, University of Chicago; Instructor in English, Brigham Young University, 1927-38; Assistant Professor of English, 1938—.

Alva J. Johanson.....Assistant Professor of Chemistry

A. B., Brigham Young University, 1931; M. A., Brigham Young University, 1934; Ph. D., University of Illinois, 1938; Graduate Work, University of Wisconsin, Summer, 1934; Assistant in Chemistry, University of Illinois, 1937-38; Assistant in Chemistry, Brigham Young University, 1931-34; Instructor in Chemistry, 1934-38; Assistant Professor of Chemistry, 1938—.

D. Elden Beck.....Assistant Professor of
Zoology and Entomology

A. B., Brigham Young University, 1929; M. A., Brigham Young University, 1930; Ph. D., Iowa State College, 1933; Head, Biology Department, Dixie College, 1933-38; Assistant Professor of Zoology and Entomology, Brigham Young University, 1938—.

Bertha Roberts.....Assistant Professor of French

A. B., Brigham Young University, 1926; Graduate Work, University of Chicago, 1929; Diploma, University of Paris, 1933-34; Graduate Work, McGill University, 1940-41; Instructor, Wasatch High School, 1918-19; Instructor in Office Practice, Brigham Young University, 1919-33; Instructor in French, 1934-39; Assistant Professor of French, 1939—.

Georgia Maeser.....Assistant Professor of
Elementary Education

B. S., Brigham Young University, 1928; M. A., Columbia University, 1938; Supervisory Teacher, Brigham Young University Training School, 1926-39; Assistant Professor of Elementary Education, 1939—.

Gladys Kotter.....Assistant Professor of
Elementary Education.

B. S., Brigham Young University, 1930; M. S., Columbia University, 1935; Supervisory Teacher, Brigham Young University Training School, 1927-39; Assistant Professor of Elementary Education, 1939—.

Fred W. Dixon.....Assistant Professor of
Physical Education and Athletics

B. S., Brigham Young University, 1926; M. S., Brigham Young University, 1939; Instructor in Physical Education and Athletic Director, Weber County High School 1926-28; Graduate Work, Utah State Agricultural College; Instructor in Physical Education and Athletics, Brigham Young University, 1928-41; Assistant Professor of Physical Education and Athletics, 1941—.

May Billings.....Assistant Professor of Home Economics

B. S., Brigham Young University, 1933; Student, Columbia University, Utah State Agricultural College, University of California, Colorado Agricultural College, University of Utah; Instructor in Clothing, Latter-Day Saints University, 1920-31; Instructor in Home Economics, Brigham Young University, 1932-42; Assistant Professor, 1942—.

Jack R. Gibb.....Assistant Professor of Psychology

A. B., Brigham Young University, 1936; M. A., Brigham Young University, 1937; Graduate Work, University of Chicago; Ph. D., Stanford University, 1943; Instructor in Psychology, Brigham Young University, 1937-42; Assistant Professor, 1942—.

Weldon J. Taylor.....Assistant Professor of Accounting
and Business Administration

B. S., Brigham Young University, 1934; M. B. A., Harvard Graduate School of Business Administration, 1937; Clerk, Federal Power Commission, 1935; Instructor in Economics, Brigham Young University, 1937-38; Instructor in Accounting and Business Administration, 1938-42; Assistant Professor, 1942—.

May C. Hammond.....Assistant Professor Elementary Education

B. S., Brigham Young University, 1934; Student, University of California and Columbia University; Graduate Work, University of Southern California, 1942-43; Instructor, Provo City Schools, 1923-25; Supervisory Teacher, Brigham Young University Training School, 1925-43; Assistant Professor, 1943—.

Evan M. Croft.....Assistant Professor Secretarial Practice

B. S., Brigham Young University, 1929; M. S., University of Southern California, 1940; Graduate Work, University of Chicago and University of Southern California; Instructor in Commercial Subjects, Lehi High School, 1929-36; Instructor in Secretarial Practice, Brigham Young University, 1936-43; Assistant Professor, 1943—.

Floyd Millet.....Assistant Professor of Physical Education
and Assistant Athletic Coach

A. B., Brigham Young University, 1933; M. S., University of Southern California, 1939; Graduate Work, Brigham Young University, Utah State Agricultural College, University of Southern California; Instructor in Physical Education and Athletics, Davis County High School, 1934-37; Instructor in Physical Education and Assistant Athletic Coach, Brigham Young University, 1937-43; Assistant Professor, 1943—.

Carma Ballif.....Associate in Treasurer's Office

B. S., Brigham Young University, 1927, Graduate Work, University of Wisconsin; Assistant in Secretary's Office, 1927-41; Instructor in Physical Education for Women, 1934-36; Associate in Treasurer's Office, 1941—.

Naoma RichAssociate Librarian

B. S., Brigham Young University, 1931; Certificate in Library Science, Riverside Library Service School, 1932; Columbia University, 1943; Librarian and Instructor in Office Practice, Bear River High School, 1927-30; Librarian, Snow College, 1933-37; Assistant Librarian, Brigham Young University, 1937-41; Associate Librarian, 1941—.

John H. Wing.....Assistant Professor of Chemistry

B. S., Brigham Young University, 1926; M. S., Brigham Young University, 1934; Graduate Work, University of Colorado, Summer, 1936; University of Iowa, Summer, 1939; Chemist, Columbia Steel Company, 1926-27; Assistant Chief Chemist, Columbia Steel Company, 1927-29; Chemist, International Smelting and Refining Company, 1929-31; Assistant in Chemistry, Brigham Young University, 1931-37; Instructor, 1937-44; Assistant Professor of Chemistry, 1944—.

Ralph A. Britsch.....Assistant Professor of English

A. B., Brigham Young University, 1933; Graduate Work, Brigham Young University, 1936; Graduate Work, University of Wisconsin, Summer, 1938; University of Washington, Summer, 1941; Instructor in English and Speech, Gunnison Valley High School, 1933-35; Instructor in Speech, Provo High School, 1936-38; Instructor in English, Brigham Young University, 1938-44; Assistant Professor of English, 1944—.

A. John Clarke.....Assistant Professor of Physics,
University High School

B. S., Brigham Young University, 1938; M. S., Brigham Young University 1941; Principal, Barnwell Consolidated School, Canada, 1930-37; Assistant in Chemistry, Brigham

Young University High School, 1937-38; Instructor in Physics, Brigham Young University High School, 1938-44; Assistant Professor of Physics, University High School, 1944—.

Harold W. Lee.....Assistant Professor of Modern Languages

A. B., Brigham Young University, 1938; M. A., Brigham Young University, 1940; In France, 1930-33; Graduate Work, University of Southern California, Summer, 1939; Stanford University, 1941-43; Assistant Instructor in Romanic Languages, Stanford University, 1942-43; Instructor in Arts and Sciences, Alberta High Schools, 1927-30; 1933-37; Assistant in French, Brigham Young University, 1937; Instructor in French, Brigham Young University, 1938-44; Assistant Professor of Modern Languages, 1944—.

Orea B. Tanner.....Assistant Professor of English

A. B., Brigham Young University, 1932; Graduate Work, University of Chicago, Summer, 1935, Teacher, Idaho Schools, 1916-19; Instructor in English, Rexburg Junior High School, 1925-30; Critic Teacher, Ricks College, Summers, 1926-27; Instructor in English, Provo High School, 1932-38; Instructor in English, Brigham Young University, 1938-44; Assistant Professor of English, 1944—.

Margaret Olsen Harris.....Assistant Professor of
Home Economics

B. S., Utah State Agricultural College, 1935; M. S., Teachers College, Columbia University, 1940; Graduate Work, Utah State Agricultural College Summer, 1935; Brigham Young University, Summer, 1936; Oregon State College, Summer, 1937; University of Utah, Summer, 1938; Instructor, Delta High School, 1935-36; Juab High School, 1936-38; Branch Agricultural College of Utah, 1938-39; Brigham Young University, 1940-41; Utah State Agricultural College, 1941-43; Assistant Professor of Home Economics, Brigham Young University, 1944—.

Verla L. Birrell.....Assistant Professor of Art

B. S., University of Utah, 1928; M. A., Claremont Colleges 1942; Student, Chicago Academy of Fine Arts, 1930; Research Work, Columbia University, 1931; Student, Art Students League, N. Y., 1931; Study and Travel in Europe, 1935; Summer Sketching, Mexico, 1938; Claremont College, Summers, 1940-41; Study and Sketching in Mexico and Central America, 1943-44; Instructor Payson High School, 1927-29; Instructor, Irving High School, Salt Lake City, 1929-37; Instructor in Art, Brigham Young University, 1937—.

Lorna Call.....Assistant Professor of Elementary Education

B. S., Brigham Young University, 1935; M. A., Columbia

University, 1940; Elementary Supervisor, Juarez Stake School System, 1930-34; Director of Teacher Training, Juarez Stake Academy, 1935-39; Supervisory Teacher, Brigham Young University Training School, 1940; Assistant Professor of Elementary Education, 1945—.

C. Lavoir Jensen.....Instructor in Mathematics

Student, Brigham Young College and University of Utah; Instructor, Logan High School, 1915-16; Principal, Midvale Schools, 1917-21; Instructor, Brigham Young University High School, 1921—.

Margaret Summerhays.....Instructor in Music

A. B., Brigham Young University, 1936; Graduate, New England Conservatory of Music, 1916; Student of Frederick H. Haymond, Mme. Sophie Cehanovske, Edmund G. Meyer, Emiel Polak, Gabriel Lafriere; Special Instructor, in Music, Brigham Young University, 1927-29; Instructor 1930—.

Gustave Buggert.....Instructor in Music

Graduate Music School of Madgeburg, Germany; Instructor in Music, Brigham Young University, 1930—.

Flora D. Fisher.....Instructor in Elementary Education

B. S., Brigham Young University, 1936; Instructor in secondary schools of Utah, 1911-33; Supervisory Teacher, Brigham Young University, Training School, 1933-1939; Instructor in Elementary Education, 1939—.

Willford D. Lee.....Instructor in English

A. B., Brigham Young University, 1934; M. A., Brigham Young University, 1937; Instructor in English, Brigham Young University, 1934—.

L. Elliott Tuttle.....Instructor in Science, University
High School

B. S., Brigham Young University, 1938; Instructor, Provo City Schools, 1932-36; Instructor Roslyn Heights, L. I., Public Schools, 1941-42; Supervisory Teacher, Brigham Young University Training School, 1936; Instructor in Science, University High School—.

Josephine Strong.....Instructor in Elementary Education

Student, University of Utah and San Francisco State Teachers College; Instructor, Salt Lake City Schools, 1922-23; Supervisor, Chinatown Nursery School, San Francisco, California, 1934-37; Supervisory Teacher, Brigham Young University Training School, 1936—.

Morris M. Clinger.....Instructor in Speech

A. B., Brigham Young University 1932; Instructor in Speech and English, Richfield High School, 1932-36; Assistant in Speech, Brigham Young University, 1936-37; Instructor, 1937—.

Lillian C. Booth.....Instructor in Elementary Education

B. S., Brigham Young University, 1940; Student, University of Chicago, 1933; Instructor, American Fork and Provo Schools; Instructor Brigham Young University Training School, 1917-18; 1924-25; Principal, Elementary Schools of American Fork, 1936-38; Instructor in Elementary Education, Brigham Young University, 1938—.

David M. Crowton.....Instructor in Physical Education
and Athletics

B. S., Brigham Young University, 1938; Assistant in Physical Education and Athletics, Brigham Young University Training Schools, 1937-38; Instructor, 1938—.

Anna Boss HartInstructor in English,
University High School

B. S., Utah State Agricultural College, 1923; M. A., University of Southern California, 1933; Graduate Work, University of Wisconsin, 1937-39; Columbia University, Summer, 1941; Instructor in Arimo, Idaho, High School, 1923-25 and 1927-28; Principal, Kelsey, Texas, High School and Elementary Grades 1926-27; Instructor in Speech and English, Logan Senior High School, 1928-35; Instructor in English, Brigham Young University High School, 1939—.

Oliver R. Smith*.....Instructor in Journalism
and Assistant in Extension Division

A. B., Brigham Young University, 1938; Assistant in Extension Division, Brigham Young University, 1938-40; Instructor in Journalism and Assistant in Extension Division, 1940—.

Wayne Soffe.....Instructor in Physical Education
and Assistant Athletic Coach

B. S., Brigham Young University, 1938; M. S. Brigham Young University, 1941; Graduate Work, Brigham Young University, 1938-39; Instructor in Physical Education and Assistant Athletic Coach, Brigham Young University, 1938—.

Joseph J. Keeler..... University Organist

B. S., Brigham Young University, 1940; Student of Karl Straube and Robert Teichmuller, Leipsic Conservatory.

*On leave.

1931-32; also at Royal College of Music, London, 1933; Instructor in Piano and Organ, Brigham Young University, 1935—.

James R. Clark.....Assistant in Library

A. B., Brigham Young University, 1936; M. A. Brigham Young University, 1944; Graduate Work, University of Denver, School of Librarianship, 1940; Principal, Lovell-Cowley Seminary, Wyoming, 1936-38; Assistant in Library, Brigham Young University, 1938—.

Thomas C. Peterson*.....Specialist, Extension Division

B. S., Brigham Young University, 1938; Secretary, Bureau of Visual Instruction, Brigham Young University, 1936—.

Lee Benson Valentine.....Instructor in Spanish

A. B., Brigham Young University, 1939; Student in Argentina, 1935-38; Assistant in Spanish, Brigham Young University, 1938-41; Instructor in Spanish, 1940—.

Sanford M. Bingham*.....Instructor in Languages,
University High School

A. B., Brigham Young University, 1939. In Germany and Switzerland, 1935-38; Instructor in German, 1939-41; Instructor in University High School, 1941—.

Gail Brown*.....Secretary to the President

A. B., Brigham Young University, 1942; Secretary to the President, 1940—.

Ione Christensen.....Instructor in Secretarial Practice

B. S., Brigham Young University, 1936; Graduate Work, University of Idaho; Gregg College, Chicago, 1940; Instructor in Commercial Subjects, Moroni High School, 1934-37; Instructor in Shorthand and Typewriting, South High School, Salt Lake City, 1937-39; Assistant in Office Practice, Brigham Young University, 1940; Instructor, 1941—.

Louis W. Booth.....Instructor in Music

A. B., Brigham Young University, 1941; M. A., Brigham Young University, 1943; Faculty, McCune School of Music and Art, Salt Lake, 1935-41; New England Conservatory of Music, Boston, 1929-31 and 1934-35; Oboe and Solfeggio under Clement Lenon; Solo Oboe with New England Conservatory of Music Orchestra; Private Study with A. Bridet in Lyons, France, 1932-34; Solo Oboe with Utah State Symphony Orchestra, Salt Lake City; Instructor in Music and French, Brigham Young University 1940—.

Julia Alleman Caine.....Instructor in Social Science
University High School.

B. S., Brigham Young University, 1925; Instructor in Salt Lake City Schools, 1925-33; Graduate Work, Brigham

*On leave.

Young University, 1935; University of Idaho, 1935; University of Utah, 1938-39; Instructor in Ucon High School, Idaho, 1935-40; Instructor in Social Science, Brigham Young University High School, 1940—.

J. Reuben Clark III.....Instructor in Modern Languages

A. B., University of Utah, 1934; University of Mexico, Summer, 1932; Graduate Work, Columbia University, 1934-39; University of Utah, Summer, 1935; Instructor Cedar City Seminary, 1940-41; Instructor in Modern Languages, Brigham Young University, 1941—.

Dortha ReidInstructor in Home Economics

A. B., Brigham Young University, 1932; Graduate Work, Oregon State College, Summer, 1936; Colorado State College, Summer, 1941; Instructor in Home Economics, Cleveland Junior High School 1932-33; Instructor in Home Economics, South Emery High School, 1933-36; Spanish Fork High School, 1936-37; Instructor in Home Economics; Provo High School, 1937-41; Instructor in Home Economics, Brigham Young University, 1941—.

Ralph Ungermann.....Instructor in Speech

A. B., Brigham Young University, 1939; M. A., Brigham Young University 1941; Assistant in Speech, Brigham Young University, 1941-42; Instructor, 1942—.

Leonard William Rice.....Instructor in English

A. B., Brigham Young University, 1941; M. A., University of Washington, 1943; Graduate Work, University of Washington, 1943; Assistant in English, Brigham Young University, 1941-42; Instructor, 1942—.

J. Roman Andrus.....Instructor in Art

B. S., Brigham Young University, 1942; M. S., Brigham Young University, 1943; Student, Otis Art Institute, 1934-39; Graduate Work, Colorado Springs Fine Art Institute, 1942; Special Instructor in Art, Brigham Young University, 1943; Instructor in Art, 1944—.

Dean A. Peterson.....Instructor in Secretarial Practice,
Secretary to the President

B. S., Brigham Young University, 1938; M. S., University of Southern California, 1942; Instructor in Commercial Subjects, North Sanpete High School, Mt. Pleasant, 1938-39; Head of Business Department, Dixie Junior College, 1939-41; Instructor in Business Department, Weber College, 1941-42; Instructor in Secretarial Practice, Brigham Young University, 1942—.

Lucile Spencer.....Assistant in Registrar's Office

B. S., Brigham Young University, 1940; Instructor in Commercial Education, Fielding High School, Paris, Idaho, 1939-40; Assistant in Registrar's Office, Brigham Young University, 1940—. Instructor in Secretarial Practice, 1942—.

- Eunice Brough** University Nurse
 R. N., L. D. S. Hospital, Salt Lake City, 1941; B. S., Brigham Young University, 1943; General Duty Nursing, Bakersfield, California, 1942; Public Health Nursing, 1942-43; University Nurse, Brigham Young University, 1943—.
- Cornelius R. Peterson***.....Assistant in Treasurer's Office.
 B. S., Brigham Young University, 1936; General Alumni Secretary, Brigham Young University, 1938; Assistant in Treasurer's Office, Brigham Young University, 1941—.
- O. Norman Geertsen**.....Assistant in Physics
 and Sound Technician
 B. S., Brigham Young University, 1930; Research Engineer, Bell Telephone Laboratories, 1930-32; Instructor in Mathematics, Ogden City Schools, 1935-36; Assistant in Physics and Sound Technician, Brigham Young University, 1941—.
- Afton Hawker**.....Clerk of Extension Division
 B. S., Brigham Young University, 1940; Clerk of Extension Division, Brigham Young University, 1940—.
- Hattie B. Knight**..... Circulation Librarian
 B. S., Brigham Young University, 1941; B. S. in L. S., University of Denver, 1943; Instructor, Idaho Public Schools, 1926-34; Principal, Goshen, Idaho, Elementary School, 1936-39; Instructor, Shelley, Idaho Junior High School, 1939-40; Assistant in Library, Brigham Young University, 1941-45; Circulation Librarian, 1945—.
- Beth Richardson** Reserve Librarian
 A. B., Brigham Young University, 1940; B. S. in L. S., University of Denver, 1944; Librarian, Richfield High School, 1940-41; Assistant in Library, Brigham Young University, 1941-45; Reserve Librarian, 1945—.
- Ernest Reimschuessel**Gardener
 Assistant in Landscape Architecture
 A. B., Brigham Young University, 1940; Assistant in Landscape Architecture, Brigham Young University, 1942—.
- Charles Haggerty**..... Assistant in Library
 A. B., Brigham Young University, 1939; Graduate Work, 1939-45; Assistant in Library, 1943—.
- Elizabeth Hill**.....Assistant Dean of Women
 A. B., Brigham Young University, 1941; M. A., Columbia University, 1944; Assistant Dean of Women, 1944—.
- Kenneth C. Bullock**.....Instructor in Geology
 B. S., Brigham Young University, 1940; M. A., Brigham

*On leave.

Young University, 1942; Graduate Work, University of Wisconsin, 1942-43; Research Assistant, University of Wisconsin, 1942-43; Instructor in Geology, Brigham Young University, 1943—.

LaPreal W. Larsen.....Instructor in Office Practice

A. B., Brigham Young University, 1938; Instructor in Office Practice, Moroni High School, 1938-40; Instructor in Commercial Subjects, Payson High School, 1940-41; Secretary Weber College, 1941-42; Instructor in Office Practice, Brigham Young University, 1944—.

LeRoy Sparks.....Instructor, University High School

A. B. Utah State Agricultural College, 1928; Graduate Work, Utah State Agricultural College, Summer, 1932; Brigham Young University, Summer, 1941; Bookkeeper, Chrysler and Dodge Distributors, 1936-38; Instructor Roosevelt High School, 1930-36; Lyman, Wyoming, High School, 1938-42; Lehi High School, 1942-44; Instructor, Brigham Young University High School, 1944—.

John Wells McAllister.....Instructor in Public School Music

A. B., Brigham Young University, 1927; Student work, Chicago Musical College, 1922, American Conservatory, 1923, Northwestern University, 1923; Instructor, Public School Music, Fresno State Teachers College, 1929; Instructor, Public School Music, Santa Barbara State Teachers College, 1934; Instructor of Band, Orchestra, Men's Chorus, Santa Barbara State Teachers College, 1935; Instructor in Public School music, Brigham Young University, 1944—.

Lars G. Crandall.....Asst. Purch. Agent

Instructor in Secretarial Practice

B. S., Brigham Young University, 1944; M. S., Brigham Young University, 1945; Instructor in Secretarial Practice 1944—.

Melbourne D. Wallace.....Instructor in Horticulture and Supervisor, B. Y. U. Farm.

B. S., Utah State Agricultural College, 1940; Vegetable Crops; Fellowship and Graduate work, Utah State Agricultural College, 1940-41; Laboratory assistant, Western Regional Research Laboratories, Albany, California, 1940-41; Agricultural advisor and chemical laboratory technician, Pleasant Grove Canning Company, 1941-44; Instructor of Horticulture, Brigham Young University, 1944—.

George L. Miller.....Instructor in Elementary Education

B. S., Brigham Young University, 1942; Instructor, Beaver County Schools, 1938-41; Principal, Box Elder County Schools, 1941-42; Instructor, Ogden City Schools, 1942-43; Instructor in Elementary Education, Brigham Young University, 1944—.

Kathryn Bullock Hall.....Instructor in Physical Education

B. S., Utah State Agricultural College, 1938; Summer Ses-

sion, Brigham Young University, 1941; Instructor in Physical Education, Cedar City High School, 1938-40; Instructor, Granite High School, Salt Lake City, 1940-42; Instructor in Physical Education, Brigham Young University, 1944—.

Ermel J. Morton.....Instructor in Journalism
Assistant in the Extension Division

A. B., Brigham Young University, 1936; Graduate work, Brigham Young University, 1940-42; Principal Makeke College, L. D. S. preparatory school, Tongan Islands, 1937-38; advertising assistant, Merrill Company, 1942; reporter and political writer, Salt Lake Telegram, 1942-44; Instructor in Journalism and Assistant in the Extension Division, Brigham Young University, 1944—.

J. Golden Taylor

B. S., Brigham Young University, 1936; M. A., Brigham Young University, 1940; Instructor in English at Union High School, Snowflake, Arizona, 1939-41; Instructor in English, Provo High School, 1942-44; Instructor in English, Brigham Young University, 1945—.

Jean Anne Waterstradt.....Instructor in English

A. B., Brigham Young University, 1945; Instructor in English, Brigham Young University, 1945—.

Lois Ensign.....Assistant Professor in Physical Education

M. S., University of Utah, 1942; M. A., University of Wisconsin, 1944; Instructor in Salt Lake City Schools, 1942-43; Assistant Professor of Physical Education, Central Washington College of Education, Ellensburg, Washington, 1944-45; Assistant Professor of Physical Education, Brigham Young University, 1945—.

Anna Stucki

B. S., Brigham Young University, 1945; Secretary to the President, Brigham Young University, 1945—.

Karl Miller.....Supervisor in Engineering and
Maintenance Service

B. S., Brigham Young University, 1932; Graduate work, 1932-33; Assistant Superintendent of Buildings and Grounds, Brigham Young University, 1934; Superintendent, 1939; Supervisor in Engineering and Maintenance Service, 1944—.

Morris R. Snell.....Supervisor in Engineering and Maintenance
Service

B. S., Brigham Young University, 1935; Graduate work U. S. A. C. summer school 1935. Head of Mechanic Arts Department, Dixie Junior College, 1935-36; Supervisor Engineering and Maintenance Service, Brigham Young University, 1936-42; Engineer, Utah Pomeroy Morrison Co., 1942-43; Supervisor in Engineering and Maintenance Service B. Y. U., 1944—.

Franklin R. Haymore.....Manager University Press;
Secretary Alumni Association

B. S., Brigham Young University, 1939; Graduate work.
1940-42; Manager of University Press, 1940; General Sec-
retary, Alumni Association, 1944—.

SPECIAL INSTRUCTORS

Elmer Nelson, Instructor in Piano.

Hannah C. Packard, A. B., Special Instructor in Vocal Music.

George W. Fitzroy, Special Instructor in Piano.

Lynn Taylor, A. B., Special Instructor in Art.

Jesse J. Weight, M. D., Associate in Bacteriology.

Mark K. Allen, M. A., Instructor in Psychology.

Lucille Sandberg, A. B., Special Instructor in Clarinet, and
Saxophone.

University History

Brigham Young University, formerly designated the Brigham Young Academy, was founded by a deed of trust executed by President Brigham Young, October 16, 1875.

It is in charge of a board of trustees, elected triennially, by the vote of the Latter-day Saints, acting through the First Presidency of the Church of Jesus Christ of Latter-day Saints.

For many years it was dependent upon fees and the proceeds of the original endowment for its maintenance, but in recent years an annual church appropriation has been the chief source of its financial support.

Buildings. The first home of the institution was in Lewis Hall, a mercantile building, standing on the northeast corner at the intersection of Center and Third West streets.

Subsequently, this building with several additions, was destroyed by fire. The school, however, resumed its sessions with the loss of but one day. The basement of the Stake Tabernacle, a store, and the First National Bank building, housed the school for a short time.

From these temporary quarters it moved into the upper story of the Z. C. M. I. warehouse, at the corner of Sixth South street and University avenue. This was the home of the school for seven years.

In 1891 the school moved to what is now known as the Education building, a structure costing \$75,000, made possible chiefly through the personal credit of President Abraham O. Smoot and his associates on the Board of Trustees.

The College building, a gift of ten persons whose names are upon a marble tablet in a hall of the building, was erected in 1898. The responsibility for raising the funds for this building was undertaken voluntarily by the late Reed Smoot, a member of the Board of Trustees.

The Training School building was built in 1902, the cost of which was met by the contributions of friends of the school, chief among whom was "Uncle" Jesse Knight.

The Art building was erected in 1904, a gift of the nearby stakes comprising what was known at that time as the B. Y. U. academic district.

The Alumni Association, in honor of Dr. Karl G. Maeser, presented the institution with the Maeser Memorial building in 1911. The cost of this building was \$112,000.00. "Uncle" Jesse Knight contributed liberally to the Alumni Association in this project. The heating plant and furnishings were provided by the Church. This building was the first to be erected on University Hill.

The Women's Gymnasium, which is also a recreation building, was erected in 1913.

The Mechanic Arts building, a one-story structure, on University Hill, was erected in 1919.

The Heber J. Grant Library building, also on University Hill, was erected in 1925.

The last three named buildings were built by Church appropriations.

In 1935, two stories were added to the Mechanic Arts building to provide additional classrooms and laboratories. The name was changed to George H. Brimhall building.

During the year 1935-36, a Stadium House, on the west side of the football field, was erected.

In 1937-38, Allen Hall—a men's dormitory—and in 1938-39, Amanda Knight Hall—a women's dormitory—were constructed. These will accommodate eighty and one hundred students, respectively.

The Joseph Smith building was commenced on the upper campus in 1939 and completed in 1941 as a project of the Church Welfare program to serve as the religious and social center of the University.

During the year 1943 the University acquired the National Youth Administration building on the east part of the campus for use of the Mechanics Arts Department.

Campus. The first campus of the school was limited to a small playground back of the building which was destroyed by fire. The present Education building was erected in the center of a block 24 by 24 rods.

Then came the purchase of University Hill. As early as 1904, steps were taken to acquire land on this site. A purchase of seventeen acres was made from Provo City. A gift of something over seven acres came from the Fourth ecclesiastical ward of Provo; part of an acre was purchased by an alumnus,

and the point of the hill by the student body. Following a movement initiated by the Alumni Association, seventy-five acres were purchased in 1923-24. Since that time purchases have been made of other tracts, not only on University Hill, but adjacent to and between the two campuses, until the area now comprises approximately two hundred acres.

Administration. The first faculty consisted of the principal and two assistants, Dr. Karl G. Maeser, Dr. Milton K. Hardy, and Kristina Smoot. Dr. Karl Maeser served as principal until 1891, when he was called to the general superintendency of Church schools. Dr. Benjamin Cluff, Jr., succeeded Dr. Maeser and served as the executive head of the school until December 22, 1903. Dr. George H. Brimhall succeeded Dr. Cluff and served the institution as president until April 26, 1921, when he was made president-emeritus. On the same date Dr. Franklin Stewart Harris was appointed president, taking office July 1, 1921. Dr. Harris served until June 30, 1945, at which time he was succeeded by Howard S. McDonald.

Educational Growth. The first credential granted by the institution was a teacher's certificate given on the completion of one year's normal work. This was followed by a certificate requiring two year's normal work, followed later by the degree of Bachelor of Pedagogy, issued upon the completion of four years' normal work. Later the Bachelor of Arts and Bachelor of Science degrees were authorized to be conferred upon the completion of the regular four years' college course.

The degrees of Master of Arts and Master of Science have been authorized since 1913.

On February 11, 1909, by an action of the General Church Board of Education, the collegiate department of the University was designated The Church Teachers' College.

At the beginning of the school year 1920-21, the name Church Teachers' College was changed to School of Education and the School of Arts and Sciences was established. During 1921 a College of Commerce and Business Administration was organized and courses leading to a degree of Bachelor of Science outlined. The names, School of Education and School of Arts and Sciences, were changed to College of Education and College of Arts and Sciences. At the same time an Extension Division, a Research Division, and a Graduate Division were organized.

January 25, 1922, a college of Applied Science was established to include the departments of Agronomy, Animal Husbandry, Art, Auto Mechanics, Foods and Nutrition, Horticul-

ture, Household Administration, Textiles and Clothing, and Woodwork. On April 21, 1925, a College of Fine Arts was established to include the departments of Art, Music and Speech.

During the year 1928-29, the Y Stadium was completed, the name of the College of Commerce and Business Administration was changed to College of Commerce; and the Graduate Division was changed to Graduate School.

On January 11, 1940, there was established a Division of Religion in which were centered the religious teaching and religious activity of the institution.

War Service. During the War the University has aided in training personnel for the Army through the following programs: The Army Specialized Training Program, Engineering Science Management and Defense Training, and Civil Pilot Training.

Requirements

General Requirements For Undergraduate Work

ADMISSION

A student seeking admission to any of the colleges of the University must be a graduate of an accredited high school, or he must present sixteen units of approved high school work which must be acquired during four school years, or he must pass an examination in a sufficient number of subjects to make sixteen units. In no case shall fewer than twelve of the sixteen units be acquired during the last three years of high school.

He must offer among his credits the following:

English.....3 units

A principal group 3 or more units

A secondary group 2 or more units

The principal and secondary groups must be selected from either Mathematics and Science or from History and Social Science. At least one unit in Mathematics, either Algebra or Geometry, must be included in either the principal or the secondary group. If the principal group is from Mathematics and Science, the secondary group, must be from History and Social Science, or vice versa.

To facilitate registration, a student seeking admission is requested to forward an official copy of his credits to the Registrar not later than September 1. If blanks for this purpose are not to be had at the local school, they may be obtained from the Registrar at the University.

In case a student is unable to furnish an official transcript of credits on or before the day of registration, he may be admitted tentatively, provided the committee on admission and credits is convinced he can furnish such transcript and otherwise meet the entrance requirements within thirty days. During this tentative period he will be rated as unclassified.

A student of twenty-one years of age or over, who has not completed sixteen units of high school work, but shows ability to do special work, may be admitted to any of the colleges of the University. Ability to do special work must be certified to by the heads of the departments concerned. He may pursue any course for which he has sufficient foundation, and will be rated as an unmatriculated student. To become a candidate for a degree, such student must meet the entrance requirements.

A student who has met the entrance requirements but who is carrying fewer than eight hours of work will be designated as a special student.

Course Divisions

Undergraduate courses of study are divided into:

(a) Lower Division

(b) Upper Division

Lower Division courses are numbered in the catalogue from "1" to "49." Upper Division courses from "50" to "99." Graduate courses are given numbers above "100."

Election of Studies

The student, in electing his studies, should, with the advice and approval of the dean of the college in which he registers, elect such studies as are desirable. The major and minor, as well as the general, requirements for graduation should be kept in mind in electing studies. **Three credit hours in lower division Physical Education and one credit hour in Health I are required of all Freshmen.**

Should a resident student desire to take courses by correspondence or in extension classes, the approval of the student's dean must be secured, and the correspondence or extension work entered upon the regular registration card. Excess work taken by correspondence or extension classes not approved in this manner, will not be recorded for credit. Resident students of other institutions who apply for correspondence or extension class work at this University must have their proposed registration approved by the president of the institution in which they are registered. Students wishing to transfer correspondence credits from other institutions are subject to examination by the University department concerned.

At least five quarters of lower division work should be completed before the student registers for upper division work, unless in certain sequences the dean, with the consent of the instructor, advises otherwise. Included in the lower division work must be English 1, 2, 3; and for the A. B. degree, twelve hours in foreign language work. (A minimum of twenty-four hours of foreign language work or its equivalent must be obtained by the end of the college course for the A. B. degree.) It is recommended that as far as possible group requirements be completed by the close of the sophomore year.

Classification of Students

A regular student with fewer than forty-five credit hours at the beginning of the school year will be classed that year as a Freshman.

A regular student with more than forty-five credit hours and fewer than eighty-nine credit hours at the beginning of the year will be classed during that year as a Sophomore.

A regular student with more than eighty-nine credit hours and fewer than one hundred thirty-five at the beginning of the school year will be classed during that year as a Junior.

A regular student with more than one hundred thirty-four credit hours at the beginning of the school year will be classed during that year as a Senior.

Credits

A student may have credit entered on the books of the University as follows: 1. For work done in the regular courses offered by the institution. 2. For work done in an accredited college when such credit is to be used for graduation from the University, the amount to be determined by the committee on Admission and Credits. 3. By passing a satisfactory examination in any course offered by the University under the supervision of the head of the department concerned. Credits from other schools should be filed with the Registrar upon entrance.

Special examinations for advance credit will be given only with the consent of the head of the department concerned, the dean of the college in which the student is registered, and the committee on Admission and Credits.

An incomplete course of study must be completed during the next quarter of residence, provided the next quarter of residence is within one year; otherwise the course must be retaken in a class, or a special examination taken to obtain credit.

A fee of \$2.50 per credit hour is charged for special examinations, provided the total fee for any one subject does not exceed \$20.00.

University Credits Recognized

Brigham Young University is on the list of approved colleges of the Association of American Universities. It is also a member of the Northwest Association of Secondary and Higher Schools, the American Council on Education, and the Association of American Colleges.

The University is on the approved list of the American Association of University Women.

The Extension Division is a member of the National University Extension Association and the American Association for Adult Education.

University credits are accepted as widely as those of other similarly rated institutions.

Graduation

General Requirements

For a student to be admitted to candidacy for a diploma or a degree, his scholastic record must show that he has satisfied the entrance requirements, and that he can fulfill all the requirements for graduation on the completion of the courses for which he is registered. At the time of graduation each candidate must be properly registered in the University, and must have completed at least forty-five hours of work in residence.

The following graduation requirements apply to all candidates for a bachelor's degree from any of the colleges of the University:

Total amount of credit.....	186 hours
Requirement for a major.....	30 to 45 hours
Requirement for a minor	20 hours

Group Requirements:

Mathematics and Physical Science.....	12 hours
Biology and Psychology	12 hours
Social Science	12 hours
English and Foreign Languages.....	18 hours

Two credit hours in Religion are required of every student for each quarter in residence.

Lower Division Courses Required:

English 1, 2, and 3.

Physical Education: Three credit hours in lower division.

Health 1.

A candidate for a Bachelor of Arts degree is required to furnish 24 credit hours in a foreign language. Shopwork, shorthand and typing will not be credited toward the A. B. degree.

Not more than 28 hours of "D" grade credit will be applied towards graduation.

Students who expect to be graduated at the end of the Spring quarter should file application with their dean not later than the beginning of the Winter quarter. All conditions must be removed not later than ten days before graduation.

Students who fulfill all requirements for graduation at the close of the Summer session and who have filed application for graduation not later than thirty days preceding the close of the Spring quarter may have their graduation certified to by the proper authorities of the University, but they shall not be publicly graduated until the annual commencement of the following year.

The University reserves the right to change the requirements for graduation and a candidate for graduation will be asked to comply with all changes which pertain to the uncompleted portion of his course. The University Council is the body authorized to prescribe requirements of graduation and to pass on candidates.

Group Requirements

Ordinarily the object of the first two years of the University curriculum is to introduce the student to fundamental fields of human interest and to provide a broad basis for later specialization. In order that these purposes may be achieved, certain studies should be completed under the direction of the respective deans. Before a regular student will be permitted to register for more than five quarter hours of upper division work during any one quarter, he must choose or be tentatively assigned to a major professor and have completed the number of hours prescribed in each of the following groups:

1. Mathematics and Physical Science, 12 hours. (Mathematics, Chemistry, Physics, Geology, and Geography.) To satisfy the twelve-hour group requirements the student is urged to take work in at least two departments. At least one of the courses taken must require no fewer than two hours of laboratory work each week.

2. Biology and Psychology, 12 hours. (Bacteriology, Botany, Zoology and Entomology, Psychology.) To satisfy the twelve-hour group requirement the student is urged to take work in at least two departments. At least one of the courses must require no fewer than two hours of laboratory work each week.

3. Social Science, 12 hours. (Economics, History, Political Science, Sociology.) To satisfy the twelve-hour group requirement the student is urged to take work in at least two departments.

4. English and Foreign Languages, 18 hours, at least 12 of which must be in English. This group must include English 1, 2, and 3. In case a student has credit for at least two units of foreign language taken in high school, this group may be reduced to 14 hours.

Major and Minor Requirements

At least sixty hours of upper division work must be furnished by a student applying for graduation.

At the beginning of his college course, and in no case later than his Junior year, each student should select his major department, the head of which in connection with his dean, will serve as his special faculty adviser. At the time of his graduation he must have completed from thirty to forty-five quarter hours in the department, and no fewer than twenty hours in collateral or minor subjects which meet the approval of the head of his major department.

In cases where the prospective graduate's high school and college work shows marked evidence of deficiencies in grade of scholarship, in breadth of training, or a preparation for probable future activity, the head of the department in consultation with the dean may prescribe certain additional specified courses to the extent of fifteen quarter hours according to the needs of the particular student.

Scholarship Honors

In recognition of specially meritorious work, scholarship honors are granted to certain members of classes graduating with the Bachelor's degree. Such honors will be accorded on the following basis:

First: There is only one designation in recognition of high scholarship merit, namely, Graduation with Honor.

Second: The award of Graduation with Honor is made on the basis of excellence shown in work up to but not including the Spring quarter of the senior year.

Third: A student receiving the award of Graduation with Honor must rate as one of the highest five percent in scholarship in the graduating class. This rating is determined by computing a grade-point average by weighting the grades as follows: "A" counts 3, "B" counts 2, "C" counts 1, "D" counts 0, "E" counts -1; and by dividing the total number of points by the unnumber of credit hours acquired.

Fourth. It shall be the duty of the Committee on Graduation to make selection of candidates in accordance with these provisions.

Fifth. The announcement of honor awards is to be made at the annual commencement exercises.

Term Honors. The University will post and publish at the close of each quarter of the regular school year the names of the students who have received "A" grades in not fewer than sixteen hours.

Colleges

College of Applied Science

The aim of the College of Applied Science is to provide instruction in the scientific principles and technical operations pertaining to the farm, the home, the shop, and the professions, trades, and industries related to the same. Students may specialize in any one of the many fields of applied science and prepare for capable leadership and efficient service in their chosen lines.

The degrees, Bachelor of Science and Bachelor of Arts, are given to graduates of this College.

Majors may be selected from the following departments in the College of Applied Science: Agronomy, Animal Husbandry, Bacteriology, Horticulture and Landscape Architecture, Mechanic Arts, Home Economics.

The following courses, or their equivalents, fulfill the minimum requirements for a teaching major in home economics and also the requirements for a Utah State Vocational Home Economics Certificate:

Clothing and Textiles 1, 2, 15, 55, 68	15 hrs.
Foods and Nutrition 5, 10, 11, 12, 50	17 hrs.
Household Administration 10, 60, 61, 62, 63, 64, 80, 81	21 hrs.
Total.....	53 hrs.

The balance of credit making a minimum total of 60 hours is to be elected from the following courses: Clothing and Textiles 10, 62, 56; Foods and Nutrition 15, 53, 54; Household Administration 65, 82, 60b.

It is advised that whenever possible students elect to fulfill more than minimum requirements.

SUMMARY OF REQUIREMENTS FOR A TEACHING MAJOR IN AGRICULTURE

Agronomy 21, 22, 41, 57.

Animal Husbandry, 1, 7, 9, 21.

Horticulture 1, 3.

Landscape Architecture 13, 24.

A teaching minor in Biological Science, Physical Science, or Mechanic Arts should accompany a teaching major in Agriculture. The following courses are suggested:

Botany 1, 2, 3, 5, 60; Bacteriology 21, 22.

Zoology 11, 18, 30, 77; Chemistry 21, 22; Physics 11.

Geology 1; Mechanics 1, 2, 6, 7, 11; Drawing 3, 4.

Engineering 1, 3.

Education requirements for the certificate are as listed by the College of Education.

It is recommended that those in this college who expect to fill the requirements for teaching with a major in Agriculture, should include in the Social Science group, Agricultural Economics 60, and should also maintain close contact with the College of Education as well as with the major departments concerned.

It is further recommended that this be accomplished by registering in the College of Education.

College of Arts and Sciences

CARL F. EYRING, DEAN

The primary purpose of the College of Arts and Sciences is to meet the needs of students who desire a broad and liberal education that will enable them to find and take their places in the complex civilization of today. Abundant opportunity is provided for those who have ambition for specialized study in engineering, medicine, or law, or for those who desire to train for religious, political or social leadership. Preparation for original investigation in the fields of this college is emphasized. Students who wish to build a foundation for advanced degrees will find this college rich in opportunity.

Lower Division Registration

In order that beginning students may receive adequate guidance in the selection of a course of study, faculty advisors have been selected to give assistance according to the following plan.

DIVISIONAL REGISTRATION

Many beginning students wish to explore the fields of learning to gain not only a breadth of training but also the information needed in the selection of a life's work. To meet this need an opportunity is given for guidance in these broad areas of instruction.

General Course Division. For students who have as yet no special interests, but who need orientation.

Biological Science Division. For students with special interests in bacteriology, botany, psychology, and zoology.

Physical Science Division. For students with special interests in chemistry, geology, geography, mathematics, and physics.

Social Science Division. For students with special interests in history, political science, sociology, and economics.

Language Division. For students with special interests in English journalism, and modern and classical languages.

DEPARTMENTAL REGISTRATION

Certain lower division students may have decided on a definite career and may wish to register from the beginning in a specific department. If so, they may choose from among the following departments in the College of Arts and Sciences: Bacteriology, Botany, Chemistry, English, Geology and Geography, History, Journalism, Mathematics, Physics, Political Science, Psychology, Modern and Classical Languages, Sociology, and Zoology and Entomology.

PRE-PROFESSIONAL REGISTRATION

The College of Arts and Science offers pre-engineering, pre-medical, and pre-legal courses. Students desiring to register in these fields should make use of the guidance here offered.

PRE-ENGINEERING COURSE

Advisors: George H. Hansen, Wayne B. Hales, William H. Snell

A three-year pre-engineering course is outlined below. Not only is this course equivalent in technical training to the first two years of a standard engineering curriculum, but it also permits the student to gain a cultural background.

Freshman Year

<i>Subject</i>	<i>Credit</i>		
	A	W	S
Chemistry 4, 5, 6	5	5	5
Drawing 3, 4, 5	2	2	2
English 1, 2, 3	3	3	3
*Mathematics 11, 12, 13	5	5	5
Phys. Ed. 1, 2, 3	1	1	1
Religion 11, 12, 13	2	2	2
	—	—	—
	18	18	18

Sophomore Year

Drawing 6		2	
Engineering 40, 41, 42	2	2	2
Geology 14	5		
Mathematics 50, 51, 52	4	4	4
Mechanics 18			3
Physics 41, 42, 43	5	5	5
Religion 21, 22, 23	2	2	2
Electives		2	2
	—	—	—
	18	17	18

Junior Year

Accounting 1		5	
Economics 1	5		
Geology 51			
Mathematics 71	5		
Mathematics 81			5
Religion	2	2	2
Electives (to meet group requirements)	4	4	9
	—	—	—
	16	16	16

*A student not presenting for entrance Intermediate Algebra and Solid Geometry should also elect Mathematics 1 and 20.

PRE-MEDICAL COURSE

Advisors: Milton Marshall, C. Lynn Hayward, Russell Swensen

A three-year pre-medical course is outlined below. The student who wishes to extend his cultural background may elect a four-year course. In his senior year he should choose a

major department, and, if a degree is desired, satisfy general and departmental graduation requirements.

Freshman Year		
Autumn	Winter	Spring
English 1 3 hrs.	English 2 3 hrs.	English 3 3 hrs.
Religion 11 2 hrs.	Religion 2 hrs.	Religion 2 hrs.
Mathematics 12 5 hrs.	Zoology 11 5 hrs.	Botany 1 or 3 5 hrs.
Chemistry 4 5 hrs.	Chemistry 5 5 hrs.	Chemistry 6 2 or 3 hrs.
Phys. Ed. 1 1 hr.	Phys. Ed. 2 1 hr.	Latin 3 hrs.
		Phys. Ed. 1 hr.
Total 16 hrs.	Total 16 hrs.	Total 17 hrs.
Sophomore Year		
Autumn	Winter	Spring
Chemistry 10 3 hrs.	History 1 5 hrs.	Zoology 55 5 hrs.
Physics 41 5 hrs.	or equiv.	Physics 43 5 hrs.
Religion 2 hrs.	Physics 42 5 hrs.	Religion 2 hrs.
English 29 4 hrs.	Religion 2 hrs.	Psychology 11 5 hrs.
Zoology 18 3 hrs.	Chemistry 11 3 hrs.	
	English 21 (or 16) 2 hrs.	
Total 17 hrs.	Total 17 hrs.	Total 17 hrs.
Junior Year		
Autumn	Winter	Spring
Religion 2 hrs.	Religion 2 hrs.	Religion 2 hrs.
Chemistry 71 6 hrs.	Chemistry 72 6 hrs.	Zoology 72 3 hrs.
Zoology 56 5 hrs.	Bacteriology 21 and 22 5 hrs.	History 21 or equivalent 5 hrs.
German or French 5 hrs.	German or French 5 hrs.	German or French or elective 5 hrs.
or elective	or elective	Sociology 70 or equivalent 3 hrs.
Total 18 hrs.	Total 18 hrs.	Total 18 hrs.

PRE-LEGAL COURSE

Advisors: Christen Jensen, Elmer Miller, J. Reuben Clark III.

The Association of American Law Schools which is composed of the leading law schools in this country makes no specific requirement concerning the content of pre-legal courses of study. It does suggest that a college student should be given a thorough mental training in fundamental subjects. A pre-legal student should lay a foundation for a broad culture, develop intellectual discipline, and cultivate professional standards of study. The more important problems confronting lawyers, judges, and legislators are basically economic, political, and social. A law student should acquire not only a knowledge of legal doctrine and of the judicial processes but also of the above mentioned fields of study.

The following important advice given by a leading law school may well be brought to the attention of pre-legal students:

"Few ideas are more fallacious or harmful than the notion that it is possible to dawdle through high school and college and then make the adjustment to higher standards promptly upon entering the professional school. Essential habits of concentration and effective methods of study must be acquired and developed during the pre-legal years. Careful reading and the constant exercise of practice in writing should be cultivated assiduously . . . A large proportion of failures in the professional school may be traced directly to the neglect of opportunities in school and college."

Maturity of thought is of particular importance in the study of law. Therefore, since the standard law course calls for careful, analytical, reasoned judgment, only relatively mature students should plan to enter a law school.

The preparation for the study of law is largely an individual problem. A general formula is only of limited assistance. All students who contemplate the study of law should therefore consult the advisors to pre-legal students for more detailed advice and information.

Upper Division Registration

At least by the beginning of the junior year students should select their major department and seek the aid of the major

professor as well as the Dean in matters of registration. Students may select their majors from any of the following departments in the College of Arts and Sciences: Bacteriology, Botany, Chemistry, English, Geology and Geography, History, Journalism, Mathematics, Modern and Classical Languages, Physics, Political Science, Psychology, Sociology, and Zoology and Entomology. The degrees, Bachelor of Arts and Bachelor of Science are given to graduates of this College.

College of Commerce

The purpose of the College of Commerce is to provide training for leadership in industry and finance. Courses are so arranged that students will be given the training that will best fit them for analyzing business conditions, for efficiency in office administration, and for the demands of the industrial and financial world. The degrees, Bachelor of Arts and Bachelor of Science, are given to graduates of this College.

Majors may be selected from the following departments: Accounting and Business Administration, Agricultural Economics, Economics, Finance and Banking, Marketing, Political Science, and Secretarial Practice.

College of Education

The College of Education is one of the professional schools of the University. Its principal function is the training of teachers, principals, supervisors, and superintendents. This college meets the requirements of the Utah State Board of Education for the various grades of elementary and high school certification and for certificates and diplomas in administration and supervision.

The College of Education is made up of two constituent divisions, namely: The departments of academic instruction, and professional education departments, including the training schools.

The following departments are at present organized: Elementary Education, Philosophy of Education, Psychology, Educational Administration, Secondary Education, and Physical Education.

In addition to the foregoing departments for majors and minors in the College of Education, students of this college may complete a teaching major in any department of the University, the subject matter of which is taught in Utah high schools, provided that they fulfill the requirements of the department concerned and that they take at least the required minimum in professional and educational subjects. They may also complete a composite teaching major in one of several fields, the requirements of which are herein stated.

All students who expect to take practice teaching are required to make formal written application on blanks provided by the teacher training divisions of the College of Education at least three months prior to the date of beginning practice teaching, and preferably not later than the end of the second quarter of the junior year. Before students can be permitted to begin practice teaching, their applications for secondary training must be approved by a committee in the College of Education and by the head of the respective major subject matter department; and applications for elementary training must meet the approval of a committee in the department of Elementary Education with the head of that department serving as chairman.

Prospective elementary teachers are expected to complete the requirements for a degree in Elementary Education. The diploma of graduation is an endorsement of the student's fitness to teach in the elementary schools and will enable him to secure a first class elementary school certificate from the Utah State Board of Education.

The degrees of Bachelor of Arts and Bachelor of Science are given to graduates of this college.

Training Schools: Two training schools are established: first, an elementary training school organized for practice teaching for those preparing for kindergarten and elementary school work; second, a secondary training school which offers training in the six years in junior and senior high schools.

The Teaching Major and Minor

The head of the department which teaches the subject, shall formulate and exercise control over the teaching major. Students majoring in Secondary Education, Educational Administration, Philosophy of Education, or Psychology, who seek State certificates, shall present a teaching major subject to this regulation and also a teaching minor.

Composite Majors

Experience has shown that teachers on the secondary level are more qualified to serve the needs of the average high school when they are trained in several related subjects, rather than when they are trained in a single subject.

Upon the recommendation of the Utah State Department of Education and with the approval of the University Council, groups of related subjects have been organized into Composite Majors in Biological Science, Business, Language Arts, Mathematics and Physical Sciences, and Social Science. Details are given below. Any one of these will meet the requirements for the General Secondary Certificate.

Students who expect to become secondary teachers are advised to select their general teaching field as early as their sophomore year.

Transfers from junior colleges who seek to qualify to teach in fields where they have already studied need very careful guidance in their upper division work.

COMPOSITE MAJOR IN BIOLOGICAL SCIENCE

A.—Botany	
Botany 1, 2, 3, 60.....	19 hours
B.—Zoology and Bacteriology	
Zoology 11, 18 or 97, 30, 45, 77.....	18 hours
Bacteriology 21, 22	5 hours
	<hr/> 23 hours
C.—Geography and Geology	
Geology 11, 12	10 hours
Geography 21, 23	8 hours
	<hr/> 18 hours

COMPOSITE MAJOR IN BUSINESS

A.—Accounting	
Accounting 1, 2, 50, 65	17 hours
(Recommended, Accounting 51 and 74, 75).	
B.—Economics and Marketing	
Economics 1, 2, 51, 76	16 hours
Marketing 58	5 hours
(Recommended, Political Science. 57).	
	<hr/> 21 hours

C.—Secretarial Practice

Shorthand 14, 15, 51	9 hours
Secretarial Training 55	4 hours
Tyewriting 23, 54	4 hours
Office Machines 26	1 hour
Business Education 78	3 hours
Business English 31	3 hours
(Recommended, Shorthand 52 and Bus. Ed. 98).	

 24 hours
COMPOSITE MAJOR IN LANGUAGE ARTS**A.—English**

English 11, 15 & 16, 20, 21 & 22, 82, 97, 98	25 hours
English 83, 84, 85, 86, 87 (Choose One)	3 hours

B.—Speech

Speech 1 & 2, 4, 11 & 12, 21, 51 & 52, 72, 95.....	28 hours
(Recommended Speech 73.	

C.—Journalism

Journalism 7, 11 & 12, 21, 22	10 hours
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**COMPOSITE MAJOR IN MATHEMATICS AND
THE PHYSICAL SCIENCES**

The composite major in the Physical Sciences may be made up by doing work in three of the four departments listed below. A total of not less than 60 credit hours is required in the three chosen departments and not less than eighteen credit hours in any one department. Where more than eighteen credit hours are listed in a given department, a selection of courses is permitted.

A.—Chemistry

Chemistry 4, 5, 6, 10 & 11, 22 & 57	21 hours
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B.—Geology and Geography

Geology 11, 12, 51, 52	20 hours
Geography 20, 21, 23, 60 61	17 hours

 37 hours
C.—Mathematics

Mathematics 11, 12, 13, 50, 51	21 hours
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D.—Physics

Physics 26, 41, 42, 43	19 hours
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COMPOSITE MAJOR IN SOCIAL SCIENCE**A.—History**

1. History 10, 11, 12, 95, 96, 97	24 hours
(Recommended: History 82).	

B.—Sociology

2. Sociology 11	5 hours
Sociology 53 57, 66, 72, 79, 80, 93	11 hours

 16 hours

(Eleven hours to be selected from these)

OR

Sociology 12	5 hours
Sociology 51, 70, 74, 75, 79, 80, 82	11 hours

 16 hours

(Sociology 79 or 80 are recommended in either selection 1 or 2).

C.—Economics

Economics 1 5 hours
 Economics 2 or 14 2 or 3 hours
 (Balance of credit making a total of TWELVE
 HOURS to be taken from Economics 94 99, and
 67).

D.—Political Science

(Recommended: Political Science 67, 3 hours).

State Requirements for Teaching Certificates

GENERAL SECONDARY CERTIFICATE

—An applicant for a General Secondary Certificate must show:

1. That he has completed a standard college course of four years or its equivalent. In the absence of a degree from an accredited institution of higher learning, the requirements necessary for graduation from the Utah State School of Education shall be used as the bases for evaluation.

2. That he has a composite major consisting of not less than sixty credit hours distributed in three related subjects with not less than eighteen hours in any one subject; or a teaching major of at least thirty hours in one subject which is taught in Utah high schools, at least fifteen hours of which must be in upper division work, and a teaching-minor of eighteen hours in a subject which is taught in Utah high schools. The courses of the composite major, major, and minor should be such as are approved by the Education Department in the training institutions.

3. That he present work in the following subjects allied to education:

- 3 hours School Health Education.
- 3 hours Physical Education.
- 2 hours Safety Education.
- 10 hours in each of the following fields:
 - Language Arts
 - Physical Science
 - Biological Science

Social Science

4. That he present at least thirty hours in education including the following:

- 12 hours Secondary Observation and Directed Teaching, to include not less than 3 hours in Principles and Methods of Teaching Junior and Senior High Schools.
- 3 hours Organization and Administration, with special reference to Utah State School Law.
- 3 hours Educational Psychology.
- 3 hours Guidance and Personnel.
- 3 hours in the interpretation and articulation of junior high schools with elementary and senior high schools.

The additional credit in education may be selected from subjects pertinent to general and secondary education.

GENERAL ELEMENTARY CERTIFICATE

An applicant for a General Elementary Certificate must show:

1. That he has completed a standard college course of four years or its equivalent. In the absence of a degree from an accredited institution of higher learning, the requirements necessary for graduation from the Utah State School of Education shall be used as the bases for evaluation.

2. That he has thirty hours in elementary education subjects (in addition to the thirty-three hours specified in Paragraph 4) or in a subject taught in Utah public schools (fifteen hours of the thirty must be in upper division work) and eighteen hours in another subject taught in Utah public schools; or in an acceptable composite major.

3. That he present work in the following subjects allied to education:

- 3 hours School Health Education.
- 3 hours Physical Education for Elementary Schools.
- 2 hours Safety Education.
- 10 hours in each of the following fields:

Language Arts, to include six hours English Composition and three hours Speech (technique of normal speech and correction of speech defects).

Biological Science.

Physical Science.

Social Science.

The ten hours in any one of these subjects may be included in the requirements of paragraph 2.

4. That he present at least thirty-three hours in education including:

12 hours Observation and Directed Teaching in Elementary Schools, to include Principles of Education in Elementary Schools.

12 hours Elementary School Curriculum and methods.

3 hours Educational Psychology.

3 hours Child Development for Elementary Teachers (based upon observation of child behavior).

3 hours Organization and Administration, with special reference to Utah State School Law.

5. The applicant must indicate a major interest not directly associated with his regular work in the educational profession, and present satisfactory evidence of this interest pursued during the two years prior to application for certification or renewal.

General elementary certificates may be renewed on seven and one-half hours of acceptable upper division credit earned within the preceding five years.

RELATIONSHIP OF ELEMENTARY CERTIFICATES TO SECONDARY CERTIFICATES

General elementary certificates are valid only in elementary schools. Individuals holding General Elementary Certificates based on four years of college credit may obtain a General Secondary Certificate upon completion of a teaching major of at least thirty hours in one subject which is taught in Utah public schools, at least fifteen hours of which must be in upper division work, and a teaching minor of eighteen hours in a subject which is taught in Utah public schools; or an acceptable composite major; and by presenting fifteen credit hours in education including:

Method of Teaching in Junior and Senior high schools.

Guidance and Personnel.

5 hours Observation and Directed Teaching in Secondary Schools.

Teachers with two or more years of successful teaching experience may be excused from Observation and Directed Teaching in Secondary Schools.

These certificates may be renewed on seven and one-half hours of acceptable upper division credit earned within the preceding five years.

RELATIONSHIP OF SECONDARY CERTIFICATE TO ELEMENTARY CERTIFICATE

General secondary certificates are valid in junior and senior high schools only. Individuals holding general secondary certificates may secure general elementary certificates by presenting fifteen hours in Elementary Education including Elementary School Curriculum, and five credit hours in Observation and Directed Teaching in Elementary Schools. Teachers with two or more years of successful teaching experience in Utah schools may be excused from Observation and Directed Teaching in Elementary Schools. Teaching experience gained outside the state will be evaluated by the merits of each individual case.

The College of Fine Arts

The policy of the University has always provided for a liberal patronage of the fine arts. A constantly growing desire to offer greater opportunities to those whose inclinations and talents lead them into this field resulted in the organization of the College of Fine Arts.

With an exceptionally well prepared faculty, who have received the benefits of extended study and travel in recognized art centers, and adequate physical equipment in each department, this college is able to do work of high scholastic standing.

Any course offered in this college, leading to a degree, is the cultural equivalent to other college courses differing from them mainly in respect to the emphasis placed upon the study of the fine arts.

At present the following departments, fully organized, are included in the College of Fine Arts: Art (Drawing, Painting, Modeling, Design, History and Appreciation); Music (Theory, Instrumental, Vocal); and Speech (Public Speaking, Dramatic Art, Play Production, Speech Correction, Radio.) Majors may be selected from the work offered in these departments; minors from these, or from other departments in the university which offer allied work. Students graduated from the College of Fine Arts receive the degree of Bachelor of Arts or Bachelor of Science.

Division of Religion

It has always been the view of the Church that there was involved in the training of its youth a proper blending of religious and moral values with secular knowledge. From its inception, the institution has therefore offered courses in religion in the belief that no life is full and complete unless it is established on a firm religious and ethical basis.

The Division of Religion supervises all religious instruction and is responsible for the development and the carrying on of the religious activities program of the University.

The following departments are at present organized: (1) Theology and Religious Philosophy; (2) Church History; (3) Church Organization and Administration; and (4) Bible and Modern Scripture.

Students in any college of the University who complete thirty-four hours of Religion, which must include at least four hours in each department in the Division of Religion, may receive a special certificate for such accomplishment. The Master's degree is now offered in this field. The Doctor's degree will be offered beginning with the year 1946-47. Preliminary work leading to this degree is now available to those wishing to begin their work.

The Graduate School

All graduate work leading to higher degrees is now administered under the direction of the Graduate School.

Character of Graduate Work. The essential aim of graduate study is to develop the power to do independent work and to encourage the spirit of research. Each candidate for a higher degree is expected to possess a broad, general knowledge of his major and a fair degree of information in his minor subject.

Registration. All students pursuing graduate work are to be registered by the Dean of the Graduate School.

Students holding a Bachelor's degree equivalent to that conferred by the Brigham Young University will be admitted to graduate work without examination.

If during any quarter of the senior year a candidate for

a baccalaureate degree finds it possible to complete all requirements for such degree with a registration of fewer than sixteen hours of undergraduate credit he may register with the Dean of the Graduate School for enough graduate credit so that the total registration shall not exceed sixteen quarter hours during such quarter.

Admission to graduate courses is granted only to those who have the requisite undergraduate work in those courses or departments. In order adequately to determine this fact the student should file with the Dean of the Graduate School an official transcript of his undergraduate courses at the time that he registers for graduate study.

Each graduate student must submit his course of study and the title of his thesis to his major professor and the Dean of the Graduate School for approval. Changes in registration may be made only with their consent.

Graduate credit is given under the following conditions:

(1) The courses for which graduate credit is given must be definitely catalogued as courses carrying graduate credit. (2) Only those students who are eligible to receive graduate credit at the time a course is taken will receive graduate credit for such a course.

Admission to Candidacy. Registration for graduate study does not admit a student to candidacy for a higher degree. A graduate student who has been in residence one quarter or more, whose thesis subject has been approved, and who has given evidence of ability to do work of a graduate character may be admitted to candidacy for a higher degree by vote of the University Council. The mere accumulation of credits does not necessarily indicate ability to do graduate work. All applications for admission to candidacy for a higher degree should be made to the Dean of the Graduate School.

Requirements for the Master's Degree. Two higher degrees are offered: Master of Arts (M.A.), provided the candidate meets the foreign language requirements for the A. B. degree; and Master of Science (M.S.), if the candidate does not meet the foreign language requirements for the A. B. degree. A student may be admitted to candidacy upon the completion of the following requirements: (a) The candidate must, after securing a Bachelor's degree, furnish 45 hours of graduate credit, approved by the Dean of the Graduate School and major professor, in addition to 186 hours of college credit, and 16 units of high school credit. Beginning with the school year 1935-36 the candidate will also be required to be in residence

three quarters. (b) A thesis must be submitted based on work done in some field of investigation within the major department, and which must show evidence of independent research. The final acceptance of the thesis shall be under the supervision of a committee to be known as the Thesis Committee. This Committee shall consist of the major professor and two other persons to be selected by him. (c) At least fifteen days before graduation, the candidate must pass an oral examination to be given by a committee to be known as the Examining Committee. This Committee shall consist of five members including the Dean of the Graduate School, the major professor, and three other members to be selected by them.

The candidate shall furnish complete copies of his thesis to his major professor and to the Dean of the Graduate School at least five days before the date of the final examination. (d) A bound typewritten or printed copy of the thesis must be furnished the University library. (e) A candidate for a Master's degree must secure a grade of "B" or above in three-fourths of his graduate work. No grade below "C" will count toward a Master's degree. (f) An applicant for this degree must furnish at least one-half of his graduate credit in his major subject. The rest of the credit for this degree must be offered in work closely related to the major subject.

A maximum of nine (9) quarter hours of graduate extension credit may be applied toward a Master's degree, provided such credit has been earned through the Extension Division of this University and has been approved by the Director of the Extension Division and the Dean of the Graduate School when the candidate registers for such credit. No credit earned in Correspondence courses can be applied toward a Master's degree.

A maximum of nine (9) quarter hours of graduate credit earned in another standard college or university may be applied toward a Master's degree, but in no instance shall such transferred credit, or any extension credit, be accepted toward the fulfillment of the requirements for a Master's degree unless all such credit is closely integrated and related to the candidate's major field of study.

Under no circumstances shall a candidate be permitted to apply more than a maximum of fifteen (15) quarter hours of combined extension credit and transferred credit from other approved colleges and universities.

The use of extension credit and transferred credit for the Master's degree shall under no conditions modify the Univer-

sity requirement that a candidate for this degree must be in residence during three quarters.

A minimum of thirty (30) quarter hours of graduate credit must be secured in residence in this institution.

Work for the Doctor's Degree. Beginning with the year 1946-47 the Doctor's degree in Religion will be offered. Preliminary work leading to this degree is now available to those wishing to begin their work.

Summer Quarter

It is the policy of the Brigham Young University to make the summer session one of the regular quarters of the school year. A large corps of teachers, supplemented by well known educators from other institutions, offers a wide range of subjects from each of the departments of the school.

The summer session is divided into two terms so that students may be in attendance only part of the summer, if they desire, without hindrance to the completion of their courses. The first term is held on the Provo campus. The second term, ordinarily held on the Alpine Campus on the east slope of Mount Timpanogos, will, during the war, be held on the City Campus.

The summer session provides the opportunity for persons who are employed during the usual nine months of schooling to pursue graduate work. It provides regular students the opportunity to complete requirements for graduation in a shorter time than four years.

Extension Division

The Extension Division offers the following services: Extension classes, home study (correspondence) courses, adult education lectures and lyceum numbers, speakers for high school and seminary commencement exercises, and visual aids for school, church, and other organizations. (For more details, see Extension Division section following Courses of Instruction.)

Discipline

The maintenance of standards of honor, Christian integrity, and Latter-day Saint ideals is required. Within these limits

the students are given the fullest freedom. Those who fail to conform to these standards either in personal habits or associations are subject to discipline.

The use of tobacco will not be permitted; and having improper associates or visiting places of questionable repute will not be tolerated.

All social functions given by any organization of the school are under the direction of the standing committee on socials. Any disciplinary announcement made by the executive of the institution becomes a part of these regulations. Violations of regulations make the offender liable to suspension or expulsion.

Regular attendance is required at all recitations, laboratory and field work. The committee on attendance and scholarship has general supervision of the disciplinary work of the institution. Regular students who are not satisfactorily carrying at least ten hours' work will not be allowed to remain in the institution.

Dean of Women

The Dean of Women is charged with the general oversight of all women students, and is always ready to aid and advise them in matters pertaining to their social and personal problems. She will not only attend to the special needs of young women during school hours, but will use every precaution to see that they are properly cared for at their boarding places. All women students are required to leave a directory card with the Dean of Women when they register.

Dean of Men

The Dean of Men is charged with the general oversight of all men students, and is always ready to aid and advise them in matters pertaining to their social, personal, and vocational problems. Assistance and advice is also available regarding employment and housing problems. All men students are required to leave a directory card with the Dean of Men when they register.

Medical Director

The principal function of the medical director is to conduct the physical examinations of the students and to look after the general health conditions of the school. In addition all students have the privilege of free consultation with him at his University office during the scheduled office hours, or by appointment. He will gladly respond to all calls to investigate the presence of contagious diseases, but he cannot assume the responsibility of furnishing free treatment for such cases, as is done in schools where the students pay a medical or hospital fee. However, if those students who are unable to pay for necessary services are reported, efforts will be made to see that they are taken care of. No charge will be made for first aid service to persons injured in athletic contests or other forms of school activities, except for material used.

Fees, Expenses, Student Aids and Awards

University Fees

(All fees are payable in advance)

College and Graduate Students:

Registration fee for full year if paid at beginning of Autumn quarter	\$70.00
Activity fee for the year if paid in advance.....	12.50
Gymnasium service fee	3.00
Withdrawal deposit	1.00
<hr/>	
Total fee for year if paid in advance.....	\$86.50
Registration fee if paid quarterly.....	\$25.00
Activity fee for quarter only	5.00
Gymnasium service fee for quarter only.....	1.00
Withdrawal deposit	1.00
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Total quarterly fee for first registration of the school year	\$32.00
(Total fee for re-registration for a second or third quarter, \$31.00).	

Secondary Training School:

Senior High School—10th, 11th, and 12th grades— registration fee for the year.....	\$20.00
Activity fee	3.00
Gymnasium service fee .....	.50
<hr/>	
Total fee for the year	\$23.50
Junior High School—7th, 8th, and 9th grades— total registration fee for the year	\$10.00

Elementary Training School:

Kindergarten to 6th grade, for the year.....	\$10.00
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Special Fees:

Late Registration (after first week of each quarter)....	\$ 2.00
Special students (eight credit hours or less), for each credit hour (Minimum registration, \$5.00).....	2.50
Special examinations per credit hour	2.50
(The maximum fee in any one subject shall not exceed \$20.00).	

Training fee (for those who elect Secondary or Elementary Training) 5.00

Private instruction is offered in Vocal and Instrumental Music and Speech for which special fees are charged. The rates for the several instructors will be furnished upon request.

Laboratory fees are charged for special work in some departments.

A breakage deposit is required in the department of Chemistry.

Fees and costs for instruction and services for special groups under contract with governmental and other agencies are fixed by arrangement.

Graduation:

Degree\$10.00

REFUNDS

No refunds will be granted to students who are requested to withdraw from the University because of scholarship or any other cause.

All students when paying fees are given official receipts by the Treasurer's Office. These receipts must be presented before refunds are allowed. The students, therefore, should exercise care that the receipts are not lost or mislaid.

All fees except \$5.00 will be refunded to any student in residence in good standing who withdraws during the first week of the quarter. One-half of all fees paid will be refunded to any student in residence who withdraws during the second or third week of the quarter. No refunds will be allowed after the third week.

Student Expenses

The cost of books varies from \$5.00 to \$10.00 a quarter, depending upon the number and the nature of the courses elected.

Dormitory Facilities. Dormitories, providing healthful and congenial living quarters for both men and women students, will be available on a cooperative basis.

Allen Hall for men and Amanda Knight Hall for women provide every modern convenience. All accommodations are furnished, including furniture, bedding, and linen. The occupants

do all the necessary work aside from the cooking, and pay the actual expense of operation. This results in some saving to the occupants.

Applications to live in any of the school dormitories should be filed with Dean Wesley P. Lloyd, before the opening of school, and should be accompanied by a deposit fee of \$5. If the student decides later not to enter the University, the deposit fee will be returned, provided notification has been given 10 days before the opening of the term.

Board and room in private homes costs from \$7.00 to \$10.00 per week. By renting rooms and boarding themselves, students are able to reduce considerably the cost of room and board.

If students desiring assistance will call on the Student Accommodations Committee when they arrive in Provo, they will be directed to the kind of place they wish. When students desire to change boarding places, they are expected to call on and notify the chairman of this committee.

The University insists that boys and girls be housed separately. The boarding houses are inspected to see that accommodations are satisfactory. The University maintains a Cafeteria, where students may secure meals at cost.

Loan Funds

The lending of the following loan funds is under the supervision of the Deans' Council:

The Emmeline B. Wells Relief Society Loan Fund. In honor of Emmeline B. Wells, the General Board of the Relief Society has established a loan fund to assist young women to complete their school work.

Student Loan Fund. The Sophomore class of 1922 established a loan fund to assist students to complete their school work. This fund is augmented each year, the Sophomore class assuming the responsibility for making an annual addition.

Gamma Phi Omicron Loan Fund. The Home Economics Club of the University (Gamma Phi Omicron) has established a loan fund to assist students of the Home Economics department.

Alpha Kappa Psi Loan Fund. The Alpha Kappa Psi has established a loan fund for senior students of the College of Commerce.

Federation of Women's Clubs Loan Fund. The First District Federation of Women's Clubs of Utah has established a loan fund to be lent to the senior girls of the University.

G. Melvin Paulson and Zora Colton Paulson Loan Fund. This loan fund was established by the Christensen Construction Company for the benefit of deserving students in good standing.

Paul Lewis Harding and Lucille Christensen Harding Loan Fund. This loan fund was established by the Christensen Construction Company for the benefit of women students who are in special need of assistance.

Stanley Waldo Christensen and Leah Nebeker Christensen Loan Fund. This loan fund was established by the Christensen Construction Company for deserving students in good standing.

Catherine Dean Christensen Memorial Loan Fund. This loan fund was established by the Christensen Construction Company for deserving students in good standing, preferably girls who intend to enter the teaching profession.

Richard R. Lyman Loan Fund. This revolving permanent loan fund was established by Dr. Richard R. Lyman to assist worthy students.

Utah Stake Relief Society Loan Fund. This fund was established in 1938 by the members of the Utah Stake Relief Society. It is to be used to help needy young women students.

Amy Brown Lyman Relief Society Loan and Scholarship Fund. This Loan and Scholarship Fund, available for young women students, was established in 1943 by the General Board of Relief Society.

Heber J. Grant and Augusta W. Grant Loan Fund. This permanent revolving loan fund was established by President Heber J. Grant in 1943 to assist worthy students.

Maud Rogers Taylor Loan Fund. This loan fund was established in 1943 by Thomas N. Taylor in memory of his wife, Maud Rogers Taylor. It is available for young women students.

David Parish Howells Loan Fund. This fund was established in 1944 by Mrs. Adele Cannon Howells to aid worthy students of the University to continue their education.

Zina Young Card Loan Fund. This loan fund was established in 1945 by Thomas N. Taylor as an expression of his regard for Zina Young Card.

Eliza Nicholls Taylor Loan Fund. This loan fund was established in 1945 by Thomas N. Taylor in memory of his mother, Eliza Nicholls Taylor.

Student Employment

The Committee on Student Aid and Employment does everything possible to assist worthy students in finding employment. This includes not only placing students in positions within the University campus, but also assistance in finding part-time employment in off-campus jobs, as well as board and room work for both men and women. Students are not encouraged to attempt to earn their entire way through school, since this ordinarily takes too much time from their studies. (See Scholarships).

Scholarships and Assistantships

Graduate Assistantships. A number of departments of the University employ graduate students on a part-time basis. The remuneration varies according to the nature of the work and the training and experience of the applicant.

Students who secure such appointments are necessarily limited in the number of courses for which they may register.

All correspondence with regard to appointments as graduate assistants should be addressed to the Dean of the Graduate School.

Scholarships to High School Graduates. A scholarship of \$25 is available to a worthy member of each graduating class of a number of designated high schools. It is awarded on the basis of scholarship, character, and potentialities for leadership. Application should be made through the high school principal to the Chairman of the Committee on Scholarships.

Service Scholarships. The University annually grants many Service Scholarships to students capable of assisting departments with stenographic, clerical, laboratory, and other work. These scholarships afford opportunities to earn tuition and fees while acquiring valuable experience and training under supervision of faculty specialists. Application forms may be obtained from the Chairman of the Committee on Student Employment.

Annual Commercial Contest Scholarships. Scholarships are awarded to winners of specified events in the Intermountain Commercial Contest for high school students held at the University each year.

Mask Club Scholarship. An award of \$25 is given annually to the junior or senior of the Speech Department attaining the highest average in scholarship and excellence in Speech Arts. This award is given upon registration the following school year. The Dean of the College of Fine Arts and members of the speech faculty make the selection.

Speech Tournament Scholarships. The University awards two annual scholarships representing one year's tuition and fees to two high school seniors attaining the highest degree of excellence in speech achieved in the Brigham Young University Speech Tournament. Character and scholarship record in the high school will also be considered in making the selection.

The Speech Department awards a quarter's free instruction in private speech to the student attaining highest excellence in dramatic art achieved in the Annual Speech Tournament. This private instruction may be taken from any member of the speech department staff.

Journalism Contest Scholarships. Three scholarships are awarded to winners in the journalism contests held in connection with the Annual Intermountain School Journalists' Conference at the University. Any high school or junior college student in attendance at the Conference is eligible to participate.

Harrison R. Merrill - Utah Magazine Scholarships. To honor the memory of the late Professor Harrison R. Merrill, the Utah Magazine annually offers three scholarships of \$25 each to be awarded to seniors of Utah high schools who write the best short stories on Western themes. Adjudication is by the Journalism Department faculty.

Margaret Vilate Elliott Scholarship in Home Economics. Miss Elliott offers annually a cash scholarship of \$50 to the student in Home Economics designated for the award by the faculty of that department.

Gamma Phi Omicron Sorority Scholarship. The Gamma Phi Omicron offers annually a cash scholarship of \$50 to the lower division student in Home Economics selected for the award by the faculty of that department. This cash award is to be applied on the student's tuition for the following school year.

Provo Business and Professional Women's Club Scholarship. A scholarship of \$86.50 is awarded annually to a Provo girl who has completed her Freshman year and who is financially deserving. A member of the Business and Professional Women's Club acts with the committee which selects the recipient.

Southern California Inter-Stake Scholarships. In cooperation with the five Southern California Stakes (South Los Angeles, Pasadena, Long Beach, Inglewood, San Fernando) the University annually awards a seventy dollar scholarship to pay for tuition at the University to the winner of the annual Inter-Stake Public Speech Tournament conducted each spring. The four runners-up will be awarded each a twenty-five dollar scholarship to the Brigham Young University. The winners of this Inter-Stake activity will be selected by an Inter-Stake Council composed of stake speech directors and Aaronic Priesthood representatives of the various stakes as approved by the respective stake presidents and M. I. A. presidents and superintendents. Alternates may be named by the Council.

KLS Radio Scholarships. KSL of Salt Lake City annually awards two one-hundred dollar scholarships to pay for tuition and books for attendance the following year at the Brigham Young University. These awards are given to encourage a greater and more professional interest in radio, perfection of the speaking voice, and for radio excellence in vocal and instrumental art. The recipients of the awards are to be selected by the Radio Committee and the Registrar. Actual radio participation will predominate the selections.

Sears Roebuck Scholarship. A cash award of fifty dollars is given annually by the Provo management of Sears Roebuck & Company to an outstanding upper division major in Commerce. Selection is to be made by members of the department of Commerce.

Charles E. and Margaret P. Maw Scholarships. Attorney

Carlyle E. Maw has made available \$550 for scholarships in Chemistry in honor of his parents, Dr. and Mrs. Charles E. Maw.

Awards

Students eligible for these awards must be duly registered and carrying successfully at least ten hours of University work:

Provo Chamber of Commerce Medal. The Provo Chamber of Commerce presents annually a gold medal to the most efficient student in the University, based upon scholarship, social status, and public service.

Adams Gold Medal. Mr. and Mrs. Walter Adams present annually a gold medal to the most efficient student being graduated from the Music department whose major instrument is a stringed instrument.

Taylor Gold Medal. Taylor Brothers Company presents annually a gold medal to the most efficient student being graduated from the Music department whose major instrument is the piano.

Alpha Kappa Psi Scholarship Award. Alpha Kappa Psi Fraternity awards annually the Alpha Kappa Psi Scholarship Medallion to the male student of the junior class in commerce who possesses the highest scholastic average for three years' work taken in this University.

Dr. Horace G. Merrill Silver Loving Cup is awarded to the student of the University who shall attain first place in the annual Cross Country Run, held immediately preceding the Thanksgiving recess. Should a student win first place more than twice the cup becomes the property of such student.

Woolley Gold Medal. Miss Mary Woolley presents annually a gold medal to the student giving the best rendition of a dramatic reading.

Stein Gold Medal. Mr. J. Edwin Stein offers annually a gold medal for the most efficient athlete. Efficiency is based upon the participation in athletics, scholarship, and social activity.

R. R. Irvine Medal is presented annually for excellence in oratory, subject to be based upon some economic problem.

Class of 1919 Gold Medal is awarded annually for excellence in vocal art.

Noble Medal. Mrs. Hazel Noble Boyack offers annually a gold medal to the most efficient senior student enrolled in the Home Economics department. The selection of such student will be made by the faculty of the Home Economics department.

The Provo Drama Center, Mask Award. An award of \$25 is given each year for the best one-act play of merit, on a Western or pioneer theme.

Provo Rotary Club Gold Medal. A gold medal is awarded to the winner of an oratorical contest on some subject of international good will.

Studio Guild Medal. A gold medal is awarded annually by the Studio Guild for the best landscape painting done during the school year in any medium. Members of the Art department faculty and the officers of the Studio Guild make the selection.

Dramatic Service Awards. The Dramatic Art Department awards annually a dramatic honor pin to each of three students who have given the most helpful service to the University and to the community during the year.

Egbert Gold Medal. Miss Anna Egbert gives a gold medal for the most efficient debater each year. The award is made in honor of her father, Robert N. Egbert.

Sigma Xi Award. The Society of Sigma Xi of the University awards annually a gold medal for the best piece of research done during the year by any student of the University.

Oscar B. Young Award. An award of \$50 given annually by Professor Kimball Young for the best essay on some phase of Mormon Community Life. The adjudication is under the supervision of the Sociology department.

I. E. Brockbank Award. Isaac E. Brockbank of Provo presents annually a cash award of \$25 for the best production in art in any medium.

Delta Phi Fraternity presents annually a gold medal for excellence in extemporaneous speaking.

Tau Kappa Alpha Fraternity presents two gold medals to the winners of the inter-class debate league.

Phi Chi Theta Scholarship Award. Phi Chi Theta awards annually the Phi Chi Theta Scholarship Key to the woman student of the junior class in commerce who possesses the highest scholastic average for three years' work taken in this University, and who is majoring in this field.

Elsie Chamberlain Carroll Medal. Mrs. Elsie Chamberlain Carroll presents annually a gold medal to the woman student of the University writing the best short story.

J. Marinus Jensen Medal. Professor Jensen presents annually a gold medal to the man student of the University writing the best short story.

Journalism Awards. Omega Nu, journalism fraternity, fosters annual contests in short story, feature article, essay, verse, and news writing. Awards are donated by members of the Journalism Department faculty.

Graham Journalism Award. Howard Graham annually gives a gold medal to be awarded to a student who has done exceptional journalistic service to the University.

Green Journalism Medal. Forace Green, graduate of the B. Y. U. Journalism Department, annually gives a gold medal to the outstanding Journalism graduate.

Sundberg Award. Mrs. Flora Harvey Sundberg awards annually a cash award to the most outstanding student in Religious Education.

Norman G. Beradt Band Medal. Norman G. Berndt of Salt Lake City annually makes an award to the outstanding band member. This award is based on musicianship, service to the University, and scholarship; and the recipient is selected by the Band Director, the Dean of the College of Fine Arts, and the Registrar.

Arch L. Madsen Award. An award is made each year by Arch L. Madsen of Radio KOVO for the most competent student in advertising. The recipient is selected by members of the faculty of the College of Commerce and the staff of KOVO. Service to the University, ability to write advertising copy, and scholarship are bases for selection.

Alumni Award. The Salt Lake City B. Y. U. Dancing Club annually awards a life membership valued at \$25 to the valedictorian of the graduating class.

Utah Tax Payers' Association Award. The Utah Tax Pay-

ers' Association annually grants an award of \$100 to some student to aid in conducting a study in public finance.

Charles E. Maw Award. An annual award given by an anonymous graduate who wishes to express his appreciation to Dr. Maw and the Department of Chemistry. This award consists of a membership in the American Chemical Society and a year's subscription to Chemical Abstracts. Based on character, scholarship, and activity in the Department.

Gerald B. Barton Award. Membership in the American Chemical Society is given annually by Gerald B. Barton to an outstanding student in chemistry, selected by Chemistry faculty and the Registrar.

Endowments

The Jesse Knight Endowment Fund. On December 21, 1914, the late Jesse Knight made an endowment to the University of one hundred thousand dollars in six per cent bonds. The interest payments on these bonds, together with the payments on bonds which have matured, have been placed at interest, and the cash credit on this account now represents approximately twice the amount of the original endowment.

The Brigham Young University Permanent Endowment Fund. June 4, 1929, the B. Y. U. Associated Alumni initiated a permanent endowment fund for the University. Some very generous contributions and subscriptions were made at this alumni reunion, and the work of building such an endowment has been carried forward by the alumni and school officials with very gratifying results. Members of graduating classes since that time have shown a remarkably loyal spirit by subscribing to this fund.

Research Funds. The University is in possession of a number of research funds which make possible scientific investigation in several specific fields.

Library, Collections, Laboratories

Library

The University Library contains more than 138,500 volumes and 50,000 pamphlets and bulletins. These publications cover all phases of human interest and offer opportunity to make intensive studies in almost any field of the sciences, or arts. The library has for years been a Government Depository to receive all Government documents. These documents are all well classified and indexed. Besides the Government Documents the Library has nearly a complete set of all agricultural experiment station literature from every state in the Union. It regularly receives important state documents on education, history, politics, and various other topics as they are issued by the different states, and is on the publication exchange lists of many of the colleges and universities of the United States and elsewhere. The Carnegie Institution of Washington, the Carnegie Peace Foundation, the Rockefeller Foundation, the General Education Board, the American Council on Education, the Milbank Memorial Fund, the Bell Telephone Laboratories, and several of the large business organizations, all supply technical and informative literature. The Library subscribes for such technical journals and magazines as are essential to a thorough college education, and it maintains its own book bindery.

Each year the Library strengthens itself along specialized lines through contributions of books to its special collections, of which the following are now being rapidly augmented:

- B. Y. U. Women (Memorial) Collection—General.
- Brimhall Collection—Theology.
- Bennion Collection—Biography.
- Cannon Collection—General.
- C. H. Carroll—Medical.
- Chamberlain (Wm. H.) Collection—Philosophy.
- Egbert Collection—Music.
- Harris Collection—Mexico.
- Heber J. Grant—General.
- Henning Collection—Archaeology.
- Hinckley Collection—Geology.
- International Relations Club—International Questions.
- Evins Collection—The American Indian.
- Christen Jensen Collection—Political Science.
- Jex Collection—General.

Jordan Club Collection—Biology.
Lund Collection—Music.
McKay Collection—Education.
Mask Club Collection—Dramatics.
Nelke Collection—General Literature.
Reynolds Collection—Literature.
Smith (F. W.) Collection—Chemistry.
Soros Club Collection (Memorial)—General.
Spilsbury Collection—Home Economics.
Talmage Collection—Science and Religion.
Utah and Provo Stakes Collection—Genealogy.
Whitaker Collection—Foreign Languages.
Whitecotton Collection—Literature.
Widtsoe Collection—Agriculture.

The Library is open each school day during the regular school year from 8 A. M. until 10 P. M.; on Saturdays from 10 A. M. until 4 P. M.; and during the Summer Session from 7:30 A. M. until 9 P. M.

Departmental Libraries

Several of the departments have made collections which range from a few dozen to several thousands of books and pamphlets which are used to supplement laboratory and class work. Most of the books in the department libraries are not included in the enumeration given above for the main Library.

Scientific and Art Collections

The Zoological and Entomological Collections of the University consist of a large series of identified vertebrate and invertebrate species of Utah and contiguous states. A complete series of fish, amphibians, reptiles, birds and mammals of this region are to be found in the collection. The fish collection is especially rich in species and specimens from the Intermountain Region. The bird collection consists of about 4,500 skins, 1,000 of which were collected in the Magdalena River Valley of South America by Chester Van Buren in 1901-03.

The Entomological collections consist of 260,000 specimens. The Tom Spaulding Collection of Utah Lepidoptera, the Chester Van Buren Collection of South American Butterflies, the Charles W. Leng Weevil Collection, the Charles Schaeffer Weevil Collection, and many species of weevils from the Blatchley Collection form important portions of this collection.

These collection are being added to annually by means of collection expeditions that are sent out to various parts of the Western United States. During 1944- 45 fifteen hundred specimens of reptiles and twenty-five thousand specimens of insects were received from staff members and former students who are on duty in the South Pacific.

The Botanical Collection includes a herbarium of liverworts, mosses and vascular plants; and also an extensive series of preserved algae, fungi, liverworts, mosses, ferns, and seed plants. There is also included a series of plants which illustrate various plant diseases.

The herbarium is made up principally of plants collected throughout the Western States, but many species from other regions are included. The collection of North American plants includes 170 families, 1,000 genera, and 3,500 species, represented by about 20,000 herbarium sheets. There is also a collection of plants from Siberia, obtained by President F. S. Harris in 1929, as well as a small group of plants from Europe and from South America.

The Geological Collections of the University consist of an unusually complete series of minerals and an interesting variety of fossils.

The minerals number many thousands and are representative of the great western mining districts together with hundreds of localities of note. Part of this collection once represented the nucleus of the famous Deseret Museum collection of Salt Lake City.

The fossil series are representative of many states and typical world localities: Much of this material was also formerly a part of the Deseret Museum collection. The vertebrate collection is especially rich in original fossils and casts of the characteristic mammalian fauna that lived in the Western states during the immediate geologic past.

The Archaeological Collection includes a number of well prepared case exhibits of Utah Indian materials, including pottery, basketry, stone implements, wearing apparel and picture writings. It also includes a number of South Pacific Islands collections, together with what is thought to be the finest South American collection of Indian pottery in the West.

The Fine Arts Collection of paintings, sculpture, drawings, etchings, engravings, monotypes, lithographs, and reproductions of works of art are as follows:

I. Memorial Collections.

1. The Lee Greene Richards Collection of 36 paintings.
 2. The James T. Harwood Collection of 90 paintings, etchings, and drawings.
 3. The John Hafen Collection of 24 paintings.
 4. The Elbert H. Eastmond Collection of 64 paintings.
 5. The John Willard Clawson Collection of 85 paintings and sketches.
 6. The Maynard Dixon Collection of 85 paintings, and sketches.
 7. The Edwin Evans Collection of 61 paintings.
 8. The Rose Hartwell Collection of 71 paintings.
 9. The Rose Hartwell Crafts Collection.
 10. The Joseph Imhof Collection of lithographs.
- II There are many other Utah artists represented in the Brigham Young University Fine Arts Collection, including George M. Ottinger, Daniel Weggeland, John Hafen, Loris Pratt, John B. Fairbanks, Samuel Jepsen, Minerva Teichert, Alma Wright, Waldo Midgley, Calvin Fletcher, Cornelius Salisbury, Joseph Everett, Henri Moser, Torlief Knaphus, Avard Fairbanks, Henry Rasmussen, etc., etc.
- III. Well known national artists represented in the collection include Lee Randolph, George Elmer Browne, Fern Gary, Gordon Grant, Marie A. Hull, Haley Lever, Clarence Millet, Luis F. Mora, Chauncey F. Ryder, Matteo Sandona, W. Lester Stevens, Anthony Thieme, John Law Walker, J. Alden Weir, John Whorf, Elliot Daingerfield, George Pierce Ennis, John E. Costigan, George Henry Taggart, William Morris, Jon Corbino, J. Connaway, Robert Brackman, Peter Hurd, Marguerite Pearson, Henry W. Ranger, John Twachtman, John F. Carlson, Gene Kloss.
- IV. Original etchings, lithographs, prints, including the work of Ernest Fiene, Rockwell Kent, Joe Jones, Reginald Marsh, Waldo Pierce and Herbert Dunton and 24 Rembrandt replicas.
- V. Oriental art including Japanese paintings, prints, and reproductions.
- VI. Reproductions of famous works of art including various types of modern art.
- VII. Large collections of slides including natural color slides and the George K. Lewis memorial collection of kodachrome slides.

Laboratories

Well-equipped laboratories for experiment and research are provided for students in the following departments: Agronomy, Bacteriology, Botany, Chemistry, Geology and Geography, Horticulture and Landscape Architecture, Physics, Psychology, Speech, Zoology and Entomology.

Other departments, such as Art, Home Economics, and Mechanic Arts, have studios, workrooms, or shops, in which students apply the principles learned in the courses in theory. The University Farm and Orchards are helpful in the study of agriculture and associated subjects.

Extracurricular Organizations and Opportunities

With the exception of freshmen and transfers in the first quarter of residence, all regular students desiring to participate in any form of extracurricular activity are required to show at least ten hours of academic work taken and completed within the quarter immediately preceding the one in which they desire to participate, and carrying a minimum grade point average of "C". After three quarters of residence all such regular students are also required to show at least thirty hours of work taken and completed within the three quarters immediately preceding the one in which they desire to participate, and carrying a minimum grade point average of "C."

Associated Students

General Organization. This organization is composed of all students who attend Brigham Young University and is presided over by officers elected by them. It seeks to develop interest on the part of every student in all those activities which contribute to a more democratic "Y" spirit, and to help provide opportunities for all students to participate in those activities which interest them most. Through this organization, student traditions are kept alive. All interclass and intercollegiate activities are encouraged and unified by this organization. For-ensic, dramatic, and music activities are fostered under its management and through it the students publish student periodicals and the University yearbook, the "Banyan." The organization also functions as an auxiliary of University discipline.

A series of concerts and lectures by renowned performers is provided for the students, who are admitted free on presentation of their activity cards. (See Lyceum Course.)

Associated Men Students. All men students registered are members of the Associated Men. The organization is designed to promote specific interests of "Y" men, and to foster a wholesome masculine atmosphere on the campus. The executive council, consisting of three student leaders and the Dean of Men, supplemented by the twelve members of the "Y" men's council, forms the governing group.

Associated Women Students. This is an organization comprising all girls registered in the institution. Its purpose is to

aid and foster all girls' activities. This organization is also a member of the Western Division of the National Organization of Associated Women Students, which includes practically all of the universities and colleges in the United States.

The Presidents' Club. This club is composed of the presidents of all clubs, units, classes, and other student organizations upon the campus. Its purpose is to preserve harmony in student activities by maintaining student unity, rather than cliquishness and club-consciousness. The President of the Associated Students presides over it and calls the club together whenever it is thought advisable by the Student Council.

White Key. Women's honorary organization installed on the campus in 1933. Membership consists of girls outstanding in scholarship, initiative, and ability to serve. Its purpose is to foster university activities of merit and to render service to the associated students.

Intercollegiate Knights. National Underclassman's Service Fraternity. It is designed to promote and foster fellowship, school activities and traditions, as well as inter-school friendship. Special duties include the lighting of the "Y" on the mountain, from which it derives the name of the Gold "Y" Chapter, sponsoring rallies, contests, and meets. Membership is based on activity and scholarship.

Y Calcares. A service organization for Sophomore girls. Membership may include Freshman girls of each spring quarter who have outstanding qualifications in scholarship, participation in school activities, and interest in the school affairs. Works with other service organizations on the campus.

Religious Opportunities

Brigham Young University students have excellent opportunities for participation in religious activities. Among the organizations which make this possible are the following:

University Assemblies. Instructive programs are offered at regular assembly periods each week during the year.

University Sunday School. This organization convenes every Sunday morning during the school year. Its purpose is to give opportunity for worship and Sunday School experience, and training for Church leadership. It is intended primarily for students of the University who are away from their home

wards. The Sunday School is offered by students. Teachers are selected from the University Faculty.

Clubs and Societies

To enlarge the educational and social opportunities of the University, units, clubs, and societies are organized. In these groups, the spirit of the institution is fostered, and democracy is especially encouraged.

SOCIAL UNIT ORGANIZATION

The University recognizes proper social development as one of the important by-products of college training.

To provide suitable opportunity for the fulfillment of this purpose, a Social Unit Organization has been adopted.

The plan provides that every student in the University shall belong to a social unit. These units include from twenty to thirty members, grouped on the basis of sex, social interest, and congeniality. The whole scheme is democratically supervised by the faculty Social Unit Committee. The Inter-Social Unit Council, made up of representatives from each Social Unit, has jurisdiction over the internal affairs of the units, such as fees, rush week, initiation, etc.

The Social Units are doing much to keep alive the social ideals of the University and to perpetuate the democratic social traditions characteristic of the Student Body.

DEPARTMENTAL ORGANIZATIONS

The University encourages a number of organizations which have the specific purpose of bringing together persons of similar scholastic interests and of rendering their work more pleasurable and profitable. Each group will foster the activities of the department to which it is allied. The eligibility rules thereof will be such that any member of the department may qualify for membership by meeting the scholastic requirements imposed by the organization. The fees will be reduced to a minimum. Each organization will have a faculty adviser. The following departmental clubs and societies have been organized:

Sigma Sigma Alpha. This organization is open to students of scientific agriculture who maintain high scholastic standing, the purpose being to meet and receive instruction from men who have succeeded practically and scientifically in

the agricultural work of the state. Social functions in conjunction with the Home Economics department are featured during the year.

David Starr Jordan Biology Club. This club aims to develop interests in all forms of biological study and has, for its major project, the building of a library of natural science literature. Some 500 volumes have been collected by club members. The increasing animal and plant collections of the department and the laboratory at Utah lake, offer interesting materials for new students. Besides resident students, the membership includes faculty members, alumni and prominent townspeople.

Drama League. The purpose of this league is to foster the art of reading and dramatics, to appreciate paintings and music, and to give opportunity to its members to hear lectures and readings from the best talent of the state as well as from performers who are on the lecture platform and the stage. The society meets weekly. It is affiliated with the Drama League of America.

Foreign Language Clubs. Teachers and students interested in the study of French or Spanish or German or Latin are organized into clubs. These clubs meet twice a month and enjoy programs of songs, talks, reports, games, etc., in which the foreign languages are the medium of speech. Membership is open not only to students but also to all people within easy reach of the University who have studied or are studying the modern languages. Membership privileges are especially extended to people of the community of French, German, Spanish, or Spanish-American birth.

Gamma Phi Omicron. (Home Economics.) An organization of the advanced students majoring in some phase of Home Economics. Its purpose is to develop culture and scholarship among its members, and to lend its aid in establishing better homes and community life.

Home Economics Club. The club is intended to create a professional spirit among students of Home Economics. Regular meetings are held at which interesting lectures are given. Special activities are fostered. All girls registered in Home Economic courses are eligible for membership.

Graduate Club. This club is an organization of the students of the University who are pursuing graduate study. The purpose of the organization "shall be to foster fellowship among its members; to stimulate a desire for higher learning; to assist

in finding and developing leadership in the communities; and to use every effort to enhance the interests of Brigham Young University." A student becomes a member automatically upon registration in the graduate school.

Literary Club. The purpose of this organization is to develop greater appreciation of good literature and to give opportunity for practice in oral and written expression. Carefully prepared lectures on literary topics and dramatic readings will be given by advanced students, members of the English faculty, and others.

"Y" Psychological Society. An organization to foster a better understanding of scientific psychology, and to supplement the regular courses of the department by affording the opportunity of discussing certain current problems by advanced students and outside speakers.

Studio Guild. This organization is for the benefit of students having special talent in any particular phase of fine art and applied art. Lectures on practical topics in connection with arts and crafts are given by members of the faculty and other recognized educators. Exhibitions of artists' and of craftsmen's work are held under the auspices of this organization.

Theta Sigma Rho. An honorary fraternity for returned women missionaries on the "Y" campus. Its purpose is to provide an opportunity for association of women missionaries in cultural, spiritual, and social activities, thereby maintaining the missionary spirit.

Many interesting and worthwhile activities are carried on during the school year.

The "Y" Chemical Society. An organization consisting of students interested in the field of chemistry. Meetings are held every alternate week, at which time lectures dealing with the outstanding problems in chemistry, or material intimately connected with this field are given by authorities on the specific subjects. Various excursions to the outstanding institutions of scientific value and interest in the state are sponsored.

International Relations Club. The purpose of this club is to stimulate interest in a clearer understanding of international problems and to develop a spirit of world helpfulness and peace. The club is sponsored by the Carnegie Endowment for International Peace. It is under the general supervision of the Department of Political Science.

Omega Nu. The Omega Nu honorary journalism fraternity was founded in the autumn of 1935 to stimulate interest in journalism and to promote higher standards in the field.

Geographical Clubs are organized for the furthering of social enjoyment and the establishing of bonds of interest between the school and the home.

National Fraternities

Theta Alpha Phi. National professional dramatic fraternity. Co-educational. The Utah Beta Chapter was installed at this institution in 1924. The purpose is to foster artistic achievement in all of the arts and crafts of the theatre.

Tau Kappa Alpha. Honorary national debating fraternity. Those who engage in inter-collegiate debating and oratory or who attain marked distinction in forensic activity are eligible to membership.

Alpha Kappa Psi. (Beta Delta Chapter.) A professional commerce fraternity, the purpose of which is to foster studies in commerce, encourage scholarship and association between members and the commercial world. Male College of Commerce students are eligible for membership.

Beta Beta Beta. (Phi Chapter.) Installed January 31, 1931. An international honorary biological fraternity, which emphasizes a three-fold program: Sound scholarship; dissemination of scientific knowledge; and promptness of biological research. All junior and senior students having twenty-four hours of biological credit are eligible for membership.

Phi Delta Pi. Women's National professional physical education fraternity. Xi Chapter installed November 21, 1931. Its purpose is to stimulate professional and scholastic interest in physical education.

Blue Key. The Blue Key national honorary leadership fraternity was chartered at the Brigham Young University in the Spring of 1932. Its purpose is to foster Student Body projects of merit which cannot well be handled by any other organization. It is an upper-classmen organization, the membership of which is fixed at from twelve to twenty active members.

Sigma Pi Sigma. A national honorary Physics Society with the following objectives: (1) to stimulate high scholar-

ship, (2) to create an interest in research and the advanced study of physics, and (3) to encourage friendship among the majors in the department. Installed May 2, 1936.

Lambda Delta Sigma. Lambda Delta Sigma is a national organization of students which has as its objective the fostering of religious, cultural, intellectual, and social ideals. It is sponsored by the Church Department of Education and at present extends to sixteen Western colleges. Its membership is open to all college students who desire to maintain Latter-day Saint standards of living. It is directed by an executive council through which all chapters operate. This fraternity is very active on the "Y" campus, with seven chapters now functioning.

Delta Phi. A national honor fraternity whose membership on the "Y" campus is elected from those who have served as missionaries for more than six months. Its purpose is to foster spiritual activity, high ideals, fellowship and sociability. Regular programs and lunches are conducted during the school year at which men of the Church and state are the principal speakers. The "Y" chapter is associated with like chapters at the Utah State Agricultural College and the University of Utah.

Phi Chi Theta. (Psi Chapter.) Installed March 12, 1938, A women's national professional fraternity. The purposes and objectives for which this fraternity is organized are to promote the cause of higher business education and training for women, to foster higher ideals for women in business careers, and to encourage fraternal cooperation among women preparing for such careers.

Non-Student Organizations

B. Y. U. Women's ~~Organization~~ Organization. The purpose of this organization is to foster the ideals of the institution and to help furnish recreation and social amusement for the faculty. A woman is eligible for membership in this organization and becomes a member on payment of dues provided that at the time she seeks admission she is either: (1) a present faculty member (a faculty member is one who holds at least the rank of instructor); (2) a past faculty member; (3) a matron; (4) a board member; (5) the wife of a faculty member who has died in the service of the school; (6) the wife of a present faculty or board member.

Faculty Fine Arts Club. This club is organized to develop and maintain a closer cooperation among the members of the fine arts faculty; to increase the appreciation of each member for all arts; to keep the members aware of what is going on in the various fields of fine arts; and to encourage among the members original creations in music, literature, painting, etc.

Alumni Association

The B. Y. U. Alumni Association was organized in 1893. The purpose of the organization is to promote the highest interests of the Institution and a closer fellowship between alumni and students. The constitution provides that, "anyone who has successfully completed one quarter at B. Y. U. may become an active member by paying his annual dues of \$2 or Life Membership of \$25." Life memberships may be paid in installments of \$5 per year for five years. Combined life memberships for husband and wife are \$35 and may be paid in installments of \$7 per year. Alumni local chapters are functioning in various parts of Utah and in other states.

Beginning with the class of '38, all graduates receive a certificate of membership into the B. Y. U. Alumni Association with dues paid for the first year out of school. They are active members and receive all advantages as active members.

Six of the twelve Board of Directors are elected each year at the Annual Alumni Banquet held during Commencement Week. The president, vice-president, treasurer, and recording secretary are appointed each year by the active board of directors.

In 1938 a permanent general secretary of the Association was appointed to serve as a medium of communication between the University and the alumni and to get students thinking "alumni." This position is now held by Franklin R. Haymore.

Lyceum Course

For nearly a half century the University has brought to its students distinguished men and women in music, lecture, and art. During the past year the following appeared:

- Licia AlbaneseSoprano, Metropolitan Opera Co.
 Carlos Alexander (Summer) Baritone
 One concert and four appearances with Roth Quartet
 Roger Baldwin Lecturer
 Busch Little Symphony with Adolf Busch and Frances Magnes,
 violinists, and Eugene Istomin, pianist.
 Jan and Mischel Cherniavsky Piano and Cello
 Two concerts.
 Cellus Dougherty and Vincenz RuzickaDuo-Pianists
 Helen Duke and Walter Shaw (Summer).....Duo-Pianists
 Walter Duranty Journalist and Author
 Rabbi Alexander Feinsilver Lecturer
 Rudolf Firkusny Pianist
 Fisk Jubilee Singers Vocal Ensemble
 Andor Foldes Pianist
 Carl Fuerstner (Summer) Pianist
 One concert and eight appearances with Roth Quartet.
 Bertita Harding Author
 Hart House Quartet String Ensemble
 Two concerts
 Konrad Heiden Author
 Mary Hutchinson Actress
 Ionian Male Quartet (Summer) Vocal Ensemble
 Alexander Kerensky Russian Statesman
 Two lectures.
 Erika Mann Author
 Marjorie Moffett Monologist
 Ferenc Molnar, violist, and Carl Fuerstner, pianist
 Dr. Venon Nash (Summer) Lecturer
 National Operatic Quartet.....Polyna Stoska, Winifred Hejdt
 Gilbert Russell, Jess Walters
 Alfred NoyesEnglish Poet
 Egon Petri Pianist
 Two concerts.
 Ezio Pinza Basso, Metropolitan Opera Co.
 Arthur Poister Organist
 Roth Quartet (Summer) String Ensemble
 Nine concerts and ten broadcasts.
 Sigrid Schultz Correspondent and Author
 Henry W. Simon (Summer) Lecturer and Critic
 Kurt Singer Lecturer
 Richard Struna Lecturer
 T. R. Ybarra Author
 Efrem Zimbalist Violinist

Courses of Instruction

Agronomy

Professors Martin, Harrison, Stewart, Nicholes; Associate Professors Anderson, Coffman, Mr. Wallace.

Students interested in the range management phase of forestry are advised to take the following courses:

Botany 1, 3, 60, 70, 80; Agronomy 21, 23, 41, 57, 73; Animal Husbandry 4, 5; Horticulture 3, 40; Landscape Architecture 20; Zoology 11, 30, 57; Surveying 1.

Lower Division Courses

- 21. General Crops.** Winter. M. W. F., 10:00. Three credit hours. Staff.

This course will deal with the fundamental principles underlying the production of crops. Selection, grading, judging and methods of protection will be studied.

- 22. General Crops Laboratory.** Winter. M. W., 2:00-5:00. Two credit hours. Staff.
Designed to accompany 21 as a laboratory course.

- 23. Range Forage Crops.** Spring. M. W. F., 9:00. Three credit hours. Harrison.

Native and cultivated grasses and other plants useful as forage are treated from the standpoint of their systematic classification, ecology, distribution, and relative value. Prerequisite: Botany 3.

- 40. Weeds.** Autumn. T. Th., 2:00. Three credit hours. Staff.
(See Horticulture 40.)

- 41. Elementary Soils.** Autumn. T. Th., 8:00; Lab., Th., 3:00-5:00. Three credit hours. Martin.

A review of the physical, chemical, and microbiological phase of soil study with emphasis on soil physics.

- 42. Irrigation and Drainage.** Winter. M. W. F., 11:00. Three credit hours. Anderson, (Not given this year).

A study of factors associated with proper use of irrigation water; irrigation water supply; water measurements; drainage in relation to irrigation practices; drainage and alkali; drainage systems.

Upper Division Courses

52. Soil Chemistry. Spring. M. W. F., 8:00. Three credit hours. Nicholes. (See Chemistry 54.)

53. Chemical Analysis. Winter. Th., 3:00-5:00. Two credit hours. Martin.

A laboratory course designed to supplement the lecture courses in Soil Chemistry and Soil Fertility. Complete quantitative analysis are made of soils, fertilizers, and organic matter.

55. Soil Fertility. Winter. M. W. F., 8:00. Three credit hours. Martin.

This course involves a study of the underlying principles of soil fertility. Soil alkali, soil chemical analysis, commercial fertilizers, farm manures, green manures, crop rotations are among the topics studied.

57. Soil Classification and Survey. Spring. T. Th., 8:00. Three credit hours. Martin. (Lab. Th. 3:00-5:00.) (See Geology 57.)

A study is made of the influence of geologic forces and climatic environment on soil development, classification of soils based upon soil profile characteristics, and methods of soil survey. Prerequisites: Agronomy 41, Geology 2, Surveying 1.

58. Seed Analysis. Winter. Three credit hours. (See Horticulture 58.)

59. Plant Genetics. Winter. M. W. F., 9:00. Three credit hours. (See Horticulture 59.)

60. Farm Management. Winter. Daily, 1:00. Five credit hours. Staff. (See Animal Husbandry 60.)

This course takes up the general consideration of farm management; types of farming, farm layout, farm capital, equipment, labor, tenancy, etc.

61. Conservation and Land Utilization. Spring. M. W. F., 11:00. Three credit hours. (See Geography 61.)

62. Biometry. (See Horticulture 60.)

70. Plant Pathology. (See Botany 70.)

73. Range Management. Three credit hours. Spring. M. W. F., 10:00. Staff. (Not given this year.)

The management of range land will be studied with respect to soil erosion, flood, watershed, forage and timber production, and livestock grazing. Prerequisites: Botany 1, 3, or permission of instructor.

75. Geography of Agriculture. Three to six credit hours in proportion to amount of work done. Stewart and Martin.

A course dealing with the location and nature of agricultural development, including grazing, as determined by climate, topography, soil, water supply, transportation, markets, and other geographic influences.

91. Conservation of Plant and Soil Resources. Four credit hours. Stewart. Time to be arranged. Extra credit for additional work may be obtained.

This course consists of a study of the conservation problems related to water, soil, range, and forest and their influence on farm and community stabilization.

92. Soil Microbiology. Winter. T. Th. F., 8:00; Lab. W. F., 3:00-5:00. Five credit hours. Martin. (Not given this year)

A lecture and laboratory course designed to acquaint the student with bacteria in relation to soil fertility. Prerequisites: Bacteriology 21, 22; Agronomy 41, 52, 55, and Chemistry 10, 11.

96. Seminar. Autumn, Winter, or Spring. Th., 12:00. One credit hour. Martin.

Current agronomic literature, agricultural problems. Assigned topics will be considered in the form of a round table discussion. Required of all seniors and graduate students majoring in agronomy.

97. Research. Seniors specializing in agronomy by elect research work from three to six hours. Time and credit to be arranged. Martin, Anderson, and Stewart.

98. Special Problems. Spring. Credit and subject matter to be arranged. Martin, Anderson, and Stewart.

99. Agricultural Literature. A study of agronomic literature. Special problems and written reports. Time and credit to

be arranged. Martin, Anderson, and Stewart.

Graduate Courses

- 123. **Advanced Range Management.** Time and credit to be arranged. Stewart.
- 154. **Conservation and Land Utilization.** Spring. Three credit hours. Coffman.
- 157. **Soil Classification.** Three credit hours. Martin.
- 175. **Geography of Agriculture.** Time and credit to be arranged.
- 191. **Conservation of Plant and Soil Resources.** Four credit hours. Stewart. (Not given this year.)
- 192. **Soil Microbiology.** Autumn. Three credit hours. Martin.
- 193. **Soil Microbiology Laboratory.** Autumn. Two credit hours. Martin.
- 196. **Seminar.** Credit to be arranged.
- 197. **Research.** Time and credit to be arranged.
- 198. **Special Problems in Soils.** Time and credit to be arranged.
- 199. **Agricultural Literature.** Time and credit to be arranged.
- 200. **Thesis.** Credit to be arranged.

Animal Husbandry

Professor Ivins; Associate Professor Hayward; Mr. Wallace.

Lower Division Courses

1. **Elementary Stock Judging.** Spring. M. W. F., 1:00-4:00. Three credit hours. Staff.

This course consists of a study of the market types and classes of livestock. Field trips will be made to farms of the county where practice in scoring and judging of animals will be done.

2. **History of Breeds.** Spring. Daily, 8:00. Five credit hours. Staff.

All breeds of livestock will be studied. Emphasis will be directed to the conditions under which the breeds were formed, the men who did the work, and the adaptability of the breeds to western conditions.

4. **Beef Cattle Husbandry.** Autumn. T. Th., 1:00. Two credit hours. Ivins. (Not given this year.)

This course is a consideration of the types and breeds, feeds, care, and management of beef cattle for western conditions. The student will be made familiar with beef animals by frequent field trips.

5. **Sheep Husbandry.** Winter. T. Th., 2:00. Two credit hours. Ivins. (Not given this year.)

Types and breeds of sheep will be reviewed, followed by study of the management, care, and feeding of sheep, both on the range and on the farm.

6. **Swine Husbandry.** Winter. T. Th., 11:00. Two credit hours. Ivins. (Not given this year.)

Types, breeds, and management of swine and their place on western farms. Emphasis will be put on their relation to dairy farming.

7. **Feeding Farm Animals.** Spring. M. W. F., 10:00. Three credit hours. Ivins. (Not given this year.)

A study of the chemical composition of feeds, the needs of the animal body, the compounding of rations and methods of practice in feeding.

8. **General Poultry.** Winter. Daily, 8:00. Three credit hours. Staff. (Not given this year.)
A study of breeds, judging, breeding, incubating, brooding, housing, feeding, and marketing.
9. **Diseases of Farm Animals.** Autumn. M. W. F., 1:00. Three credit hours. Ivins. (Not given this year.)
A study of the anatomy of farm animals, of the common diseases of horses, cattle, sheep, hogs, and poultry, and of their causes, prevention, and treatment.
21. **Elements of Dairying.** Autumn. Daily, 8:00. Five credit hours. Staff.
A general survey of dairying and its relation to Utah agriculture; the secretion, composition and properties of milk; the conditions that affect quantity and quality of milk; use of milk as human food.

Upper Division Courses

50. **Horse Husbandry.** Spring. T. Th., 1:00. Two credit hours. Ivins. (Not given this year.)
A brief study of breeds of horses. Discussion of problems of feeding and management, with special emphasis on care and training of the American Saddle horse.
51. **Animal Breeding.** Autumn. M. W. F., 10:00. Three credit hours. Ivins. (Not given this year.)
Principles, practices, and methods involved in the breeding and development of domesticated animals. Mendelism in animals, transmission, heredity, value of pedigree, systems of breeding, etc.
60. **Farm Management.** Winter. Daily, 1:00. Five credit hours. Staff.
This course takes up the general consideration of farm management, with special attention to livestock on the farm.
65. **Animal Physiology.** Autumn. M. W. F., Laboratory, T., 1:00-4:00. Five credit hours. Hayward. (See Zoology 65, 66.)
81. **Milk and Milk Products.** Winter. M. W. F., 11:00. Three credit hours. Ivins. (Not given this year.)
A course dealing with the properties, composition, and constituents of milk, the manufacture and marketing of

milk products. Prerequisites: Animal Husbandry 21, and one year of Bacteriology.

- 91. Dairy Survey.** Winter. Time to be arranged. One hour a week. One credit hour. Ivins. (Not given this year.)

A study of current literature and experiments in dairy work. Each student will be expected to make reports on various subjects in this field which will be discussed by the class.

Art

*Professors Larsen, Jenson; Assistant Professor Birrell;
Mr. Andrus, Mr. Taylor.*

Students majoring in Art are required to take courses 1, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 24, 25, 26, 27, 28, 29, 70, 83, 84, 86, 87.

For students who are preparing to teach Art the department recommends at least six additional hours of upper division work to be selected under the direction of the head of the department.

Lower Division Courses

- 1. Theory and Practice of Design.** Autumn. M. W. F., 1:00. Two credit hours. Larsen.

Study of the fundamental principles of art affecting the use of form, color and texture in structural forms and decoration. Foundation course in Art Appreciation.

- 4. Graphic Representation.** Autumn. M. W. F., 2:00. Two credit hours. Larsen.

Freehand drawing in various media. Perspective emphasized.

- 5. Graphic Representation.** Winter. M. W. F., 2:00. Two credit hours. Larsen.

Life drawing.

- 6. Graphic Representation.** Spring. M. W. F., 2:00. Two

credit hours. Larsen.

Freehand Drawing. Composition in various media.

7. **Oil Painting.** Autumn. M. W. F., 3:00-5:00. Two credit hours. Larsen.

An introduction to the use of oil colors as a medium of expression.

8. **Oil Painting.** Winter. M. W. F., 3:00-5:00. Two credit hours. Larsen.

Oil painting technique emphasized.

9. **Oil Painting.** Spring. M. W. F., 3:00-5:00. Two credit hours. Larsen.

The landscape emphasized.

11. **Water Color Painting.** Autumn. T. Th., 2:00-4:00. Two credit hours. Birrell.

Survey and application of the various techniques of water color painting.

12. **Water Color Painting.** Winter. T. Th., 2:00-4:00. Two credit hours. Birrell.

Emphasis on mass, line, value, and texture as related to still life compositions.

13. **Water Color Painting.** Spring. T. Th., 3:00-5:00. Two credit hours. Birrell.

Emphasis on color as related to outdoor sketching.

- 14, 15, 16. **Commercial Art.** Autumn, Winter, Spring. T. Th., 1:00. One or two credit hours each quarter. Jenson. (See Marketing 14, 15, 16.)

17. **Process Illustrations.** Autumn. M. W. F. 9:00. Two credit hours. Andrus.

Wood cutting and related processes.

18. **Process Illustration.** Winter. M. W. F., 9:00. Two credit hours. Andrus.

Etching and Lithography.

19. **Process Illustration.** Spring. M. W. F., 9:00. Two credit hours. Andrus.

Silk Screen process.

24. **Metal Craft.** Spring. T. Th., 2:00-4:00. One credit hour Birrell. Alternate years.

Copper work, jewelry.

25. **Batik and Textile Design.** Winter. T. Th., 3:00-5:00. Two credit hours. Birrell.

Wood block, linoleum block, weaving, stencil, textile, painting and Batik used as a basis for creative design. The history of design is considered.

26. **Crafts.** Spring. T. Th., 2:00-4:00. One credit hour. Birrell.

Leather, wood, raffia and reed used as basis for creative design.

27. **Pottery, Clay Modeling, Plaster Casting.** Autumn. T. Th., 3:00-5:00. One credit hour. Birrell. Alternate years. Pottery and Modeling in clay. The figure in plastic design.

28. **Home Planning and Interior Design.** Winter. M. W. F., 1:00. Two credit hours. Larsen.

Study of the home in relation to the family needs. Art problems in connection with home planning.

29. **Interior Design.** Spring. Sec. I. M. W. F., 1:00. Section II, T. Th., 1:00. Two credit hours. Larsen.

The study of art principles as applied to the decoration and furnishing of the home.

- 39, 40, 41. **Studio Art.** Autumn, Winter, Spring. M. W. F., 3:00. Two credit hours each quarter. Staff.

- 42, 43, 44. **Art for Elementary School Teachers.** Autumn, Winter, Spring. M. W. F., 3:00. One to three credit hours each quarter. Jenson.

Simple drawing and painting with various media. Methods of teaching and integrating art with the other subjects will be stressed.

Upper Division Courses

- 54, 55, 56. **Interpretative Drawing.** Autumn, Winter, Spring. M. W. F., 2:00. Two credit hours. Larsen.

Figure and nature compositions in various media. Elementary illustration. Prerequisites: Art 4, 5, 6.

57. **Oil Painting.** Autumn. M. W. F., 3:00-5:00. Two to four credit hours. Larsen.

Emphasis upon landscape composition. Prerequisites: Art 4, 5, 6.

- 58. Oil Painting.** Winter. M. W. F., 3:00-5:00. Two to four credit hours. Larsen.
Prerequisites: Art 4, 5, 6.
- 59. Oil Painting.** Spring. M. W. F., 3:00-5:00. Two to four credit hours. Larsen.
Outdoor sketching and landscape composition. Prerequisites: Art 4, 5, 6.
- 61. Water Color Painting.** Autumn. T. Th., 2:00-4:00. Two to four credit hours. Birrell.
Landscape and still-life composition. Prerequisites: Art 4, 5, 6, 11, 12, 13.
- 62. Water Color Painting.** Winter. T. H., 2:00-4:00. Two to four credit hours. Birrell.
Still-life and figure composition. Prerequisites: Art 4, 5, 6, 11, 12, 13.
- 63. Water Color Painting.** Spring. T. Th., 3:00-5:00. Two to four credit hours. Birrell.
Outdoor sketching. Prerequisites: Art 4, 5, 6, 11, 12, 13.
- 64, 65, 66. Commercial Art.** Autumn, Winter, Spring. T. Th., 1:00. Two to four credit hours each quarter. Jenson.
Poster designing and lettering. Systems of lettering. Sign writing introduced. Historical alphabets. Prerequisites: Art 14, 15, 16.
- 67, 68, 69. Process Illustration.** Autumn, Winter, Spring. M. W. F., 9:00. Two credit hours each quarter. Andrus.
A study of various print techniques.
- 70. Advanced Design.** Autumn. T. Th. 1:00. Two credit hours. Birrell.
Spatial relationships stressed as applicable to commercial, industrial, and modern design. Prerequisite: Art 1.
- 71. Mural Design.** Winter. M. W., 11:00. Two credit hours. Birrell.
The figure in design based on special, mural treatment. Prerequisites: Art 1, 5, 70.
- 72. Plastic Design.** Spring. M. W., 11:00. Two credit hours. Birrell.
The figure and other design motifs in plastic media wood, clay, plaster. Prerequisites: Art 1, 5, 70, 71.

74. **Metal Craft.** Spring. T. Th., 2:00-4:00. One or two credit hours. Alternate years. Birrell.

Advanced work in copper and jewelry.

75. **Textile Design.** Winter. T. Th., 3:00-5:00. One or two credit hours. Birrell.

Advanced work in Textile Design.

76. **Crafts.** Spring. T. Th., 2:00-4:00. One or two credit hours. Birrell.

77. **Modeling and Casting.** Autumn. T. Th., 3:00-5:00. One or two credit hours. Birrell.

Advanced work in modeling and casting.

- 78, 79. **Home Planning and Interior Decoration** Winter and Spring. M. W. F., 1:00. Two credit hours each quarter. Larsen.

- 80, 81, 82. **Interior Decoration.** Autumn, Winter, Spring. M. W. F., 11:00. Three credit hours. Taylor.

History of Interior Design. A study of period furnishings. A practical study of the manufacture, design, installation and care of all media and materials used in interior design and home furnishings. Practical problems in interior decoration. Prerequisites: Art 1, 28, 29. (See Household Administration 52, 53, 54.)

83. **Art History and Appreciation.** Winter. T. Th., 1:00. Two credit hours. Birrell.

Prehistoric structure, graphic art and decoration. Interpretation and classification of masterpieces of architecture, sculpture, graphic arts, ornament and painting to the end of the middle ages.

84. **Art History and Appreciation.** Spring. T. Th., 1:00. Two credit hours. Birrell.

Renaissance architecture, sculpture, graphic arts, ornament and painting. Emphasis upon schools of painting beginning with the Primitive Florentine down to those of the nineteenth century. Illustrated lectures.

86. **Contemporary Art.** Winter. T. Th., 8:00. Two credit hours. Larsen.

A study of the rise and progress of contemporary art in Europe and America, beginning with the 19th Century.

- 87. American Art.** Spring. T. Th., 8:00. Two credit hours. Larsen.

A study of the crafts, sculpture, painting, architecture, and industrial arts in America.

- 89, 90, 91. Studio Art.** Autumn, Winter, Spring. Time to be arranged. One to five credit hours each quarter. Staff.

Advanced drawing and painting.

- 92, 93, 94. Art for Elementary School Teachers.** Autumn, Winter, Spring. M. W. F., 3:00. One to three credit hours. Jensen.

Simple drawing and painting with various media. Methods of teaching and integrating art with other subjects will be stressed.

- 95, 96, 97. Portrait or Figure Painting.** Autumn, Winter and Spring. Time to be arranged. Two credit hours each quarter. Andrus.

- 98, 99, 100. Mural Painting.** Autumn, Winter, Spring. Time to be arranged. Two to four credit hours. Andrus.

Graduate Courses

- 101, 102 103. Composition.** Autumn, Winter, Spring. T. Th., 9:00. Two credit hours. Larsen.

A study of the means employed by artists to achieve beauty.

- 104, 105, 106. Interpretative Drawing and Painting.** Autumn, Winter, Spring. M. W. F., 2:00. Two credit hours. Larsen
Composition study in various media.

- 107, 108, 109. Pictorial Composition.** Autumn, Winter, Spring. M. W. F., 3:00-5:00. Two to five credit hours each quarter. Larsen.

- 111, 112, 113. Water Color Painting.** Autumn, Winter, Spring. T. Th., 3:00-5:00. Two to four credit hours each quarter. Birrell.

Development of individual expression.

- 114, 115, 116. Commercial Art.** Autumn, Winter, Spring. T. Th., 1:00. Two credit hours each quarter. Jensen.

- 117, 118, 119. Process Illustration.** Autumn, Winter, Spring. Time to be arranged. Two to four credit hours each quarter. Andrus.

- 120, 121, 122. **Advanced Design.** Autumn, Winter, Spring. T. Th., Time to be arranged. Two to four credit hours each quarter. Birrell.
- 124, 125, 126. **Mural Painting.** Autumn, Winter, Spring. Daily, 9:00. Two to four credit hours each quarter. Andrus.
- 130, 131, 132. **Interior Design.** Autumn, Winter, Spring. M. W. F., 11:00. Three credit hours each quarter. Taylor.
136. **Contemporary Art.** Winter. T. Th., 8:00. Two credit hours. Larsen.
Impressionism and Modernist experiments in Europe and America.
137. **American Art.** Spring. T. Th., 8:00. Two credit hours. Larsen. Contemporary American artists and their work.
- 139, 140, 141. **Painting.** Autumn, Winter, Spring. Time to be arranged. One to five credit hours each quarter. Larsen.
- 145, 146, 147. **Portrait and Figure Painting.** Autumn, Winter, Spring. Time to be arranged. Two to four credit hours each quarter. Andrus.
- 148, 149, 150. **Mural Painting.** Autumn, Winter, Spring. Time to be arranged. Two to five credit hours each quarter. Andrus.
- 151, 152, 153. **Color.** Autumn, Winter, Spring. Time to be arranged. Two credit hours each quarter. Larsen and Andrus.
Study of the theory and use of color.
200. **Research.** Autumn, Winter, Spring. Time to be arranged. Credit to be arranged.

Bacteriology

*Professor Martin; Associate Professors Anderson, Bryner,
Snow; Dr. Weight, Mr. Wallace.*

Bacteriology is one of the subjects comprising the composite major in **Biological Science** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

- 21. General Bacteriology.** Autumn, Winter, or Spring. M. W. F., 9:00. Three credit hours. Martin and Snow.

This course will consist of a study of the general characteristics of microorganisms and their relation to man.

- 22. General Bacteriology Laboratory.** Autumn, Winter, and Spring. M. W. 1:00-3:00. Two credit hours. Martin and Snow.

Laboratory course in general bacteriology, designed to accompany Bacteriology 21.

Upper Division Courses

- 51. Systematic and Determinative Bacteriology.** Spring. Time to be arranged. Two credit hours. Anderson. (Not given this year.)

Identification and classification of bacteria based upon Bergey's Manual of Determinative Bacteriology. Taken by seniors in Bacteriology.

- 60. Sanitation and Public Health.** Spring. W. F., 8:00; Lab., W., 2:00-4:00. Three credit hours. Martin. (Not given this year.)

A study of the application of sanitary and public health practices to the health of the individual and the community.

- 62. Bacteriology of Milk.** Autumn. W. F., 8:00. Lab. Th., 1:00-3:00. Two credit years. Martin and Anderson.

Attention is given to the bacteria of milk and milk products in general, and also their relation to disease. Prerequisites: Bacteriology 21, 22; Animal Husbandry 21.

- 69. Food Bacteriology.** Spring. M. W. F., 8:00. Lab., T. Th., 1:00-3:00. Five credit hours. Martin and Wallace.

A study of microorganisms responsible for food spoilage; principles of food preservation and processing; bacteriological control of food products. Recommended prerequisite: Nutrition 5.

- 70. Bacteriology of Water and Sewage.** Winter. Two credit hours. Anderson and Martin. (Not given this year.)

Considers microorganisms in water, the testing and purification of water supplies, and the disposal of sewage.

- 71. Bacteriology of Fermentation.** Winter. M. W. F., 10:00, and one laboratory period. Four credit hours. Bryner. (See Chemistry 80.)

- 73. Clinical Diagnosis.** Spring. Three credit hours. Weight.

A course designed to acquaint students with work done in hospital and clinical laboratories. Prerequisites: Bacteriology 81, 83.

- 74. Clinical Diagnosis Laboratory.** Spring. Two credit hours. Weight.

Laboratory work done in an accredited hospital laboratory.

- 81. Medical Bacteriology and Immunology.** Winter. M. W. F., 10:00. Three credit hours. Martin and Anderson.

An advanced course in bacteriology designed for those who desire information about human diseases and who are preparing for the professions of nursing, public health, dietetics, and medicine. Prerequisites: Bacteriology 21, 22, and Nutrition 5.

- 83. Medical Bacteriology and Immunology Laboratory.** Winter. W. F., 1:00-3:00. Two credit hours. Martin and Anderson. Prerequisites: Bacteriology 22, 81.

- Bacteriology 86, 87, 88. Applied Clinical Diagnosis Laboratory.** Five hours each quarter for each course. Martin.

This work is done in an approved hospital laboratory during a year's practical intern work. The hospital is accredited by the American Medical Association through its council of Medical Education and hospitals. Its pathologists are recognized by the American Society of Clinical Pathologists. The training includes applied clinical bacteriology, serology, parasitology, microbiology, hematology, micro-technique, clinical laboratory methods, and clinical bio-

chemistry. The final credit is allowed when a statement is received from the approved pathologist that the student has completed the intern year and is eligible to take the examinations of the American Society of Clinical Pathologists.

92. **Soil Microbiology.** Winter. T. Th. F., 8:00; Lab., W. F., 3:00-5:00. Five credit hours. Martin. (Not given this year.)

A lecture and laboratory course designed to acquaint the student with microorganisms in relation to soil fertility. Prerequisites: Bacteriology 21; Agronomy 41, 52; Chemistry 10, 11.

96. **Seminar.** Th., 12:00. One credit hour each quarter. Anderson and Martin.

98. **Special Problems in Bacteriology.** Spring. Credit and subject matter to be arranged. Martin and Anderson.

Problems having to do with determinative bacteriology, algae and fungi activities in soil fermentation, disinfection and antiseptic studies, organisms which infect the nose and throat, food and fomite studies will constitute the burden of the course. Types of problems selected will be based upon the previous preparation of the student.

Graduate Courses

151. **Systematic and Determinative Bacteriology.**

171. **Bacteriology of Fermentation.**

181. **Pathogenic Bacteriology.**

182. **Pathogenic Bacteriology Laboratory.**

192. **Soil Microbiology.**

193. **Soil Microbiology Laboratory.**

196. **Seminar.**

197. **Research.**

198. **Special Problems.**

200. **Thesis.** Credit to be arranged.

Botany

*Professors Harrison, Stewart; Associate
Professor Snow.*

Students majoring in Botany should present credit in Botany 1, 3, 21, 50, 51, 52, 54, 60, 80, 83, 95, 96.

Students who desire to teach biology in high school may select a major in either the Botany or Zoology department. The following courses should be completed as a minimum: Botany 1, 2, 3, 5, 60, and 88. Bacteriology 21, Zoology 11, 18, 30, 45, 57, or 59.

Students interested in range management should take the following courses: Botany 1, 3, 23, 60, 70, 80, and 83; Agronomy 21, 41, 57, 73; Animal Husbandry, 4, 5; Horticulture and Landscape Architecture 40; Zoology 11, 53, 57; Entomology 30; Engineering 1.

Botany is one of the subjects comprising the composite major in Biological Science designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **General Botany.** Autumn, Winter, or Spring. M. W. F. 10:00. Laboratory, Sec. 1, T. Th., 1:00-3:00; Sec. 2, 3:00-5:00. Five credit hours. Harrison and Snow.

A course dealing with the fundamentals of the structure, physiology and reproduction of plants. Prerequisite course to further work in the field of plant life. Also recommended for the non-science student.

2. **General Botany.** Winter. M. W. F., 11:00. Laboratory, F., 1:00-4:00. Four credit hours. Snow

An introduction to members of the plant kingdom exclusive of seed-plants. The habitat, structure, and life-history of members of a representative series of algae, fungi, mosses, and ferns are considered.

3. **Classification of Plants.** Spring. M. W. F., 11:00. Laboratory, M. W., 1:00-3:00. Five credit hours. Harrison.

The classification of seed plants and ferns of the Wasatch region to acquire a familiarity with the general principles of systematic botany, to learn the distinctive

characteristics of the larger groups of plants, and to develop skill in the use of manuals.

5. **Trees and Shrubs.** Spring. M. W. F., 8:00. Three credit hours. Harrison and Snow.

The names and characteristics of the common trees and shrubs and their usages in commerce and as ornamentals. The cultivated species are stressed, but native species are also considered from the point of view of their classification and possible usages. This is primarily a field course.

21. **Anatomy.** Autumn. M. W. F., 1:00-3:00. Three credit hours. Harrison.

An introductory course in the origin, development, and maturation of the structures of vascular plants. Prerequisite: Botany 1.

23. **Range Forage Plants.** Spring. M. W. F., 10:00. Laboratory T. Th., 1:00-3:00. Three credit hours. Harrison

Native and cultivated grasses and other plants useful as forage are treated from the standpoint of their systematic classification, ecology, distribution, and relative value. (See Agronomy 23.)

25. **Plant Histology.** Winter. T. Th., 8:00. Three credit hours. Harrison.

A laboratory course in the technique of preparing, cutting, staining, and mounting tissues for microscopic examination. Prerequisite: Botany 1.

Upper Division Courses

50. **Morphology of Algae.** Autumn. M. W. F., 8:00-10:00. Three credit hours. Snow.

A study of the morphology, life histories, classification, and relation of the main groups of algae. Prerequisite: Botany 1.

51. **Morphology of Fungi.** Autumn. M. W. F., 10:00-12:00. Three credit hours. Snow.

A study of the development, morphology, and relationships of representative fungi. Prerequisite: Botany 1. (Not given this year.)

52. **Morphology of Bryophytes, and Pteridophytes.** Winter. M. W. F., 8:00-10:00. Three credit hours. Snow.

A study of morphology, life histories, and relationships

of the liverworts, mosses, and ferns. Prerequisites: Botany 1, 21.

54. **Morphology of Spermatophytes.** Spring. M. W. F., 8:00-10:00. Three credit hours. Snow.

A study of the morphology, life histories, classifications, and relationships of the higher plants. Prerequisites: Botany 1, 21.

60. **Plant Physiology.** Winter. M. W. F., 9:00. Laboratory, M. W., 1:00-4:00. Five credit hours. Harrison.

A lecture and laboratory course in physiology of plants, covering such topics as absorption, transpiration, synthesis of foods, digestion, and growth. Prerequisites: Botany 1; Chemistry 4, or its equivalent recommended.

70. **Plant Pathology.** Autumn. M. W. F., 9:00. Laboratory, T. Th., 1:00-3:00. Five credit hours. Harrison.

This course deals with the important diseases of cultivated plants, and with their identification, causes, and methods of control. Prerequisite: Botany 1. (Not given this year.)

80. **Plant Ecology.** Autumn. M. W. F., 8:00. Field trip or laboratory period. F., 1:00-4:00. Five credit hours. Harrison and Stewart.

The plant in relation to its environment and its adaptation to the factors of soil and climate; plant communities and succession of various types of vegetation. Prerequisite: Botany 1.

83. **Field Ecology.** Spring. M., 4:00, and field trip extending over several days. Two credit hours. Harrison.

The ecology of various types of desert vegetation and the field methods of making vegetation surveys and charting them on base maps. (Not given this year.)

85. **Plant Geography.** Winter. M. W. F., 10:00. Three credit hours. Snow.

A lecture course dealing with the relation of plants to their environment, their geographic distribution, and problems of distribution. Prerequisite: Plant classification and Ecology recommended.

86. **Experimental Ecology.** Spring. T. Th., 9:00. Laboratory, Th., 1:00-4:00. Three credit hours. Harrison.

A course dealing with the behavior of plants under

measured and controlled environmental conditions. Prerequisite: Botany 60, 80. (Not given this year.)

- 88. Conservation of Natural Resources.** Time to be arranged. Three to five credit hours. Stewart.

The need for, and the means of providing conservation of forests, shrubs, range forage, and other plant cover as they affect land-use management. The inter-relations of vegetation on water supplies and uses, on soil preservation, on livestock, and wildlife management, and on recreation are considered. Conservation of coal, minerals, and oil.

- 92. Soil Microbiology.** (See Agronomy 92.) (Not given this year.)

- 93. Soil Microbiology Laboratory.** (See Agronomy 93.) (Not given this year.)

- 95. 96. Seminar.** Autumn, Winter. M., 3:00. One credit hour each quarter. Harrison, Snow.

Required of all majors in their junior and senior years.

- 97. Special Problems in Botany.** One to five credit hours. Time and credit to be arranged. Harrison, Snow.

Graduate Courses

- 153. Advanced Special Morphology.** Time and credit to be arranged.

Critical studies in the morphology of special groups.

- 170. Plant Pathology.**

- 183. Field Ecology.** Time and credit to be arranged.

- 186. Experimental Ecology.**

- 188. Conservation of Natural Resources.**

- 189. Range and Forest Ecology.** Autumn, Spring, or Summer. One to four credit hours. Stewart.

Distribution of desert and mountain plants as influenced by the climate and soil environments. Graduate students may be admitted by application for a thesis problem in the field.

- 192. Soil Microbiology.**

193. Soil Microbiology Laboratory.

195, 196. Seminar.

197. Special Problems in Botany.

200. Research. Any quarter. Four to six credit hours. Harrison and Snow.

Independent research on a thesis problem and the writing of the thesis.

Chemistry

*Professors Maw, Nicholes; Associate Professor Bryner,
Assistant Professors Johanson, Wing.*

Students majoring in chemistry should satisfy the minimum requirements of the American Chemical Society for the bachelor's degree. These requirements are: Chemistry 4, 5, 6, 10, 11, 62; 51, 52, 53, 71, 72, 73, 81, 82, 83, and 90, 91, 92; Mathematics 11, 12, 13; 50, 51, 52; Physics 41, 42, 43; German or French 24 hours.

For a teaching major in chemistry the following courses are suggested: Chemistry 4, 5, 6, 10, 11, 22, 51, 52, and 53.

Requirements for pre-medical students, majoring in Chemistry, are: 4, 5, 6a, 10, 11, 71, 72.

Chemistry is one of the subjects comprising the composite major in Mathematics and the Physical Sciences designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. A Survey Course in Chemistry. Autumn, Winter, or Spring. M. W. F., 10:00. Three credit hours. Staff.

For students other than science majors who desire a knowledge of chemistry for its cultural value. Students who have had high school chemistry should register for Chemistry 4.

2. **Elementary General Chemistry.** Autumn, Winter, or Spring. T. Th. Time to be arranged. Two hours credit. A laboratory course in elementary general chemistry to accompany Chemistry 1. Designed especially for those who have not had high school chemistry. Staff.
4. **General Chemistry.** Autumn. Five credit hours. Section 1, Lectures M. W. F., 8:00. Laboratory T. Th., 8:00-10:00 Nicholes. Section 2, Lectures M. W. F., 2:00, Laboratory T. Th., 1:00-3:00. Staff. Quiz Section. Staff.
5. **General Chemistry.** Winter. Five credit hours. Section 1, Lectures M. W. F., 8:00. Laboratory T. Th., 8:00-10:00. Nicholes. Section 2, Lectures M. W. F., 2:00, Laboratory 1:00-3:00. Staff. Quiz Sections. Staff.

Continuation of Chemistry 4. Prerequisite:: Chemistry 4.

6. **Qualitative Analysis.** Autumn or Spring. Five credit hours. Autumn, Lectures T. Th., 8:00, Laboratory M. W. F., 8:00-10:00. Wing. Spring, Lectures M. W., 8:00 or 2:00. Section 1, Laboratory T., Th., S., 8:00-10:00, Section 2, Laboratory T. Th., 1:00-3:00, S., 10:00-12:00. Staff.

A course in the principles and practices of inorganic qualitative analysis.

- 6a. **Qualitative Analysis.** Autumn or Spring. Three credit hours. Lecture M. W. 2:00. One three hour laboratory to be arranged. Nicholes. A brief course in qualitative Analysis emphasizing properties of solutions and colloidal dispersions. The course is intended primarily for students in pre-medicine, pre-dentistry, laboratory clinical studies and pharmacy.
10. **Elementary Quantitative Analysis.** Autumn, M. 2:00. Winter, W. 2:00. One lecture, two laboratory periods. Laboratory, Autumn, M. W., or T. Th., 3:00-5:00. Winter, T. Th., 3:00-5:00. Three credit hours. Wing.

Gravimetric analysis. Prerequisites: Chemistry 6 and College Algebra.

11. **Elementary Quantitative Analysis.** Winter, M. 2:00. Spring, W. 2:00. One lecture and two laboratory periods. Laboratory, Winter, M. W., 3:00-5:00. Spring, T. Th., 3:00-5:00. Three credit hours. Wing.

Volumetric Analysis. Prerequisites: Chemistry 6 and College Algebra.

- 21. Introductory Inorganic Chemistry.** Autumn, M. W. F., 11:00. Five credit hours. Johanson. Three lectures, two recitations and two laboratory periods. Laboratory, Sec. 1, T. Th., 3:00-5:00. Sec. 2, W. F., 3:00-5:00.

An elementary course in general and inorganic chemistry with household applications. Designed for students of home economics.

- 22. Introductory Organic Chemistry.** Winter. M. W. F., 11:00. Three lectures, two recitations, and two laboratory periods. Laboratory, Sec. 1, T. Th., 3:00-5:00. Sec. 2, W. F., 3:00-5:00. Five credit hours. Johanson.

A brief course for students of home economics. Emphasis is placed on those phases of organic chemistry which are foundational for foods and nutrition, and for elementary biochemistry. Prerequisite: Chemistry 21, or equivalent.

- 23. Introductory Biochemistry.** Spring. M. W. F., 11:00. Two three-hour laboratory periods. Five credit hours. Johanson.

An elementary course for students of home economics. Prerequisite: Chemistry 22, or equivalent.

- 51, 52, 53. Principles of Chemistry.** Autumn, Winter, Spring. Lecture T. Th., 2:00. One laboratory class to be arranged. Three hours credit each quarter. Bryner. A lecture course calculated to survey the principles of Chemistry for advanced students and to direct practice in stockroom management, laboratory assistance and quiz sections.

- 54. Soil Chemistry.** Spring. M. W. F., 3:00. Four credit hours. One laboratory period, to be arranged. Nicholes.

A course dealing with the soil colloidal condition, soil physico-chemical phenomena, and soil reactions. Prerequisites: Quantitative Chemical Analysis, Agronomy 41, and Physics 41, 42, 43.

- 62. Quantitative Analysis.** Spring. M., 2:00. Two three-hour laboratory periods. M. W., 3:00-5:00. Four credit hours. Continuation of Chemistry 11. Wing and Maw.

Includes electrolytic processes, lectures demonstrations of special methods.

- 71, 72. Organic Chemistry.** Autumn, Winter. Daily, 11:00. Two laboratory periods; Sec. 1, T. Th., 1:00-3:00. Sec. II, T. Th., 3:00-5:00. Six credit hours each term. Maw.

A study of carbon compounds. Laboratory experiments in the syntheses and reactions of the different classes of organic compounds.

73. Organic Preparation. Spring. Time to be arranged. Two or three credit hours. Maw.

74. Qualitative Organic Analysis. Spring. One lecture, and two three-hour laboratory periods. Time to be arranged. Three credit hours. Maw or Johanson.

Practice in identifying pure organic compounds and simple mixtures by analysis, physical properties, and the preparation of derivatives.

77, 78. Biochemistry. Winter, Spring. M. W. F., 9:00. Three two-hour laboratory periods. M. W. F., 3:00-5:00. Five credit hours. Maw or Johanson.

The constitution and reactions of the proteins, fats, carbohydrates, and other compounds of biological significance. The chemistry of enzyme action, digestion, absorption, blood, metabolism, excretion and nutrition. The laboratory work of the second quarter consists of quantitative blood and urine analysis.

79. Biochemistry. Winter. T. Th., 8:00. Laboratory time to be arranged. Three credit hours. Maw or Johanson.

The fundamental principles and techniques of experimental animal nutrition. Small animal feeding experiments are conducted with emphasis placed upon protein, mineral, and vitamin requirements.

80. Zymo-Chemistry. Winter. Lectures, M. W. F., 10:00. Laboratory time to be arranged. Four credit hours. Bryner.

Chemistry of fermentation with special reference to the production of chemicals and industrial materials from agricultural products. Prerequisites: Chemistry 71, and Bacteriology 21.

81, 82, 83. Physical Chemistry. Autumn, Winter, Spring. M. W. F., 10:00. One three-hour laboratory period. Time to be arranged. Four credit hours each term. Bryner.

This course deals with properties of gases, liquids, solids, solutions; thermochemistry; reaction velocity; electrochemistry; equilibrium, and colloids. Prerequisites: Physics 43, Calculus, and Chemistry 11.

90, 91, 92. Seminar. Autumn, Winter, Spring. M., 4:00.

One credit hour each quarter. Maw.

Open to advanced undergraduates and required of seniors.

97. **Special Problems.** Time and credit to be arranged. Registration by permission.

Graduate Courses

106. **Studies in the History of Chemistry.** Spring. W. F., 1:00. Two credit hours. Maw.

151. **Inorganic Chemistry.** Autumn. M. W. F., 11:00. Three credit hours. Nicholes.

A study of the chemical elements, the physical basis of the periodic system, compound formation and complex substances.

162. **Quantitative Analysis.** (See Chemistry 62.)

163. **Advanced Quantitative Analysis.** Autumn. Two to ten credit hours. Time to be arranged. Maw and Wing.

The analysis of typical minerals, including silicates. Written reports.

164. **Advanced Qualitative Analysis.** Autumn. Six hours laboratory work. Three credit hours. Time to be arranged. Maw and Wing.

Laboratory exercises include anions, cations, complexions, and some of the rare elements. Micro and semi-micro techniques are employed.

166. **Special Methods of Chemical Analysis.** Autumn, Winter, or Spring. Lectures and laboratory. Time to be arranged. Two credit hours each quarter. Maw and Wing.

(a) Water. Analysis of water for industrial purposes.

(b) Electrolytic. Analysis by electrolytic methods.

(c) Assaying. Fire and wet methods of assaying.

(d) Metallurgical. Analysis of iron and steel, ferro-alloys, non-ferrous alloys, slags, etc.

(e) Fuel and Gas. Analysis of coal, coke, gases, etc.

(f) Agricultural. Analysis of agricultural products, including fertilizers, grains, feeds, etc.

(g) Foods. Analysis of foods by the official and standard methods and detection of adulterants.

(h) Clinical Analysis of blood, urine, intestinal contents, feces, etc.

167, 168. Micro-Chemical Analysis. Winter and Spring. Two three-hour laboratory periods. Time to be arranged. Three credit hours each quarter. Wing.

Training in the essential manipulative technique for qualitative and quantitative determinations by micro-chemical methods. Prerequisite: Consent of instructor.

171. Advanced Organic Chemistry. Spring. Time to be arranged. Two credit hours. Johanson.

A lecture course in theoretical organic chemistry.

173. Organic Preparation. Winter or Spring. Time to be arranged. Two or three credit hours. Maw.
hour laboratory periods. Three credit hours. Maw.
ranged. Two or three credit hours. Maw.

174. Qualitative Organic Analysis. Autumn. Time to be arranged. One lecture or conference period. Two three-hour laboratory periods. Three credit hours. Maw

175. Quantitative Organic Analysis. Winter. Time to be arranged. Two three-hour laboratory periods. Two credit hours. Wing.

176. Organic Preparations. Winter or Spring. Time to be arranged. Two or three credit hours. Maw

177, 178, 179. Biochemistry. (For description see Chemistry 77, 78, 79.)

180. Zymo-Chemistry. Winter. Lectures, M. W. F., 10:00. Laboratory, time to be arranged. Four credit hours. Bryner. (Not given this year.) (See Chemistry 80.)

181, 182, 183. Physical Chemistry. Autumn, Winter, Spring. M. W. F., 2:00. One three-hour laboratory period. Time to be arranged. Four credit hours each term. (See Chemistry 81, 82, 83, for description.) Bryner.

184, 185, 186. Advanced Physical Chemistry. Autumn, Winter, Spring. Lectures, T. Th., 11:00. Two credit hours each quarter. Bryner.

The more important phases of Physical Chemistry from the standpoint of thermodynamics. Autumn quarter includes gases, solutions, and solids. Winter: Thermochemistry and phase rule. Spring: Free energy and electrochemistry. Prerequisite: Chemistry 83.

190, 191, 192. Graduate Seminar.

197. Research. Special Problems. Time and credit to be arranged. Staff.

200. Thesis. Time and credit to be arranged.

Commerce

Accounting and Business Administration

*Professors Hoyt, Clark, Boyle, Eyring, Poulson, Lambert;
Associate Professor Pond; Assistant Professor
Taylor; Mr. Peterson.*

Students majoring in this department are required to take courses 2, 35, 51, and 74 or 75.

Accounting is one of the subjects comprising the composite majors in **Business** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **Elementary Accounting.** Autumn and Winter. Daily. Autumn, Sec. 1, 8:00. Winter, 11:00. Daily laboratory for all sections, 1:00-4:00, one hour of which is required each day. Five credit hours. Staff.

An introduction to college accounting. The aim of this course is two-fold: first, a preparation for those who plan to enter business at once, and second, as a foundation course for advanced work in accounting.

2. **Elementary Accounting.** Winter and Spring. Daily. Winter, 11:00. Spring, 11:00. Daily laboratory for all sections, 1:00-4:00. Four hours per week. Five credit hours. Staff. Continuation of Course 1.
35. **Mathematical Theory of Investment.** Winter. M. W. F., 2:00. Three credit hours. (See Mathematics 35.)
36. **Graphical and Statistical Methods.** Spring. M. W. F., 2:00. Three credit hours. (See Mathematics 36.)

Upper Division Courses

- 50, 51, 52. **Intermediate Accounting.** Autumn, Winter, Spring, M. T. W., Th., 9:00. Four credit hours each quarter. Clark.

Primarily corporation accounting with special emphasis on problems of depreciation, bases of revaluation, inventorying, etc. Open to students who have had Accounting 2, or the equivalent.

- 54. Credits and Collections.** Winter. M. W. F., 10:00. Three credit hours. Hoyt.

Principles governing the granting of credit, the control of the credit line, when and how collections are made, establishment of retail credit bureaus, contracts, installment selling plans.

- 55. Principles of Risk-Bearing.** Spring. M. W. F., 8:00. Three credit hours. Boyle. (Not given this year.) (See Economics 55.)

- 60. Office Organization and Management.** Spring. M. W. F., 10:00. Three credit hours. Hoyt.

Consideration involved in the organization and management of modern offices, including a study of the application of office machinery, equipment, and labor saving devices; and the selection and training of office employees.

- 62. Business and Industrial Management.** Autumn. M. W. F., 9:00. Three credit hours. Hoyt.

The organization and planning of business operations for the most effective control and execution.

- 63. Personnel Management.** Winter. M. W. F., 9:00. Three credit hours.

Principles and techniques involved in developing a modern personnel organization for protecting the welfare of employees and promoting effective labor management. Employee selection, training, promotion, and incentives are stressed.

- 64. Industrial Psychology.** Autumn. M. W. F., 11:00. Three credit hours. Poulson. (See Psychology 64.)

- 65. Business Psychology.** Spring. M. W. F., 11:00. Three credit hours. Poulson. (See Psychology 65.)

- 74. Principles of Statistics.** Winter. M. W. F., 11:00. Spring. 8:00. Three credit hours. Lambert.

Introduction to statistics. This course, or 75, required of all majors in Economics, Finance and Banking, Accounting and Business Administration.

- 75. Business and Economic Statistics.** Spring. M. W. F., 9:00. Three credit hours each quarter. Hoyt.

Fundamental methods of statistics in business and economic applications. Estimating future business; economic forecasting; fluctuations of business.

- 91. Cost Accounting.** Autumn. M. T. W. F., 8:00. Four credit hours. Hoyt.

Introduction to methods and principles of cost finding. Specialized methods of handling materials, costs, labor costs and overhead expense. Prerequisites: Accounting and Business Administration 50, 51, and 52.

- 92. Advanced Cost Accounting.** Winter. M. T. W. F., 8:00. Four credit hours. Hoyt.

Industrial accounting. Practical work in cost determination. Analysis of uniform cost accounting systems of modern industries. Prerequisite: Accounting and Business Administration 91.

- 93. Income Tax Procedure.** Winter. M. W. F., 11:00. Three credit hours. Hoyt.

Federal and State income tax regulations and procedure. This course is designed to qualify the student for practical income tax work. Prerequisite: Accounting and Business Administration 50, 51, and 52.

- 94. Auditing Theory.** Autumn. M W F, 11:00 Three credit hours. Hoyt.

Principles and methods of public accounting work. Rules of professional responsibility and conduct. Advanced interpretation of accounts and financial statements. Prerequisites: Accounting and Business Administration 50, 51, and 52.

- 95. Auditing Practice.** Spring. M. W. F., 11:00. Three credit hours. Hoyt.

Practical work in auditing. Technique of verification of accounts and financial statements. Audit working papers. Prerequisite: Accounting and Business Administration 94.

- 96. Advanced Accounting Problems.** Spring. M. T. W. F., 8:00. Four credit hours.

C. P. A. and American Institute of Accountant Problems. Prerequisites: Accounting and Business Administration 50, 51, 52. Courses recommended as preparation:

Accounting and Business Administration 50, 51, 52, 92, 93, and 94; Finance and Banking 43, 44, 51, and 52.

99. **Business Policy.** Spring. M. W. F., 9:00. Three credit hours. Hoyt.

This course summarizes into a unified whole all the work given in this field of business administration and emphasizes the business policies involved. Open only to seniors in business, or juniors by permission of instructor.

Graduate Courses

101. **Cost Accounting.** (See Accounting and Business Administration 91.)

102. **Advanced Cost Accounting.** (See Accounting and Business Administration 92.)

103. **Income Tax Procedure.** (See Accounting and Business Administration 93.)

104. **Auditing Theory.** (See Accounting and Business Administration 94.)

105. **Auditing Practice.** (See Accounting and Business Administration 95.)

106. **Advanced Accounting Problems.** (See Accounting and Business Administration 96.)

- 111, 112, 113. **Research in Accounting.** Hours and credit to be arranged.

- 114, 115, 116. **Research in Statistics.** Hours and credit to be arranged.

- 181, 182, 183. **Seminar in Business Psychology.** One to three credit hours. (See Psychology 181, 182, 183.)

200. **The Master's Thesis in Business Administration.** Each quarter. Staff.

Credit of not more than six hours is given upon the completion of an acceptable thesis that embodies the results of independent research in some approved field. Students should read the section of the catalogue that contains the requirements of the graduate school.

Finance and Banking

Professors H. R. Clark, Miller, Lambert; Associate Professor Pond; Mr. J. R. Clark, III.

Students majoring in Finance and Banking are required to take Accounting and Business Administration 35, 50, and 74 or 75.

Lower Division Course

14. **Economic and Financial History of the United States.** Autumn and Spring. M. W. F., 2:00. Three credit hours. Miller.

The economic development of the United States through the colonial era and the period of the industrial revolution and westward movement, with emphasis upon economic integration and industrial organization.

Upper Division Courses

- 51, 52. **Business Finance.** Autumn, Winter. M. T. W. Th., 11:00. Four credit hours each quarter. Clark.

Financial problems connected with the organization of corporations, underwriting and the sale of securities, management, expansion, and the reorganization of those that are not successful. Prerequisites: Economics 1 and 2.

53. **Money and Banking.** Spring. M. T. W. Th., 11:00. Four credit hours. Clark. (Not given this year.)

A study of the principles of money and banking and the exemplifications of these principles in the monetary and banking history of the United States. Prerequisites: Economics 1 and 2.

54. **Investments.** Spring. M. T. W. Th., 11:00. Four credit hours. Clark.

A study of the various forms and methods of investment. Prerequisite: Finance and Banking 51.

57. **Commercial Law.** Autumn. M. T. W. Th., 2:00. Four credit hours. Clark III. (See Political Science 57.)

58. **Commercial Law.** Winter. M. T. W. Th., 2:00. Four credit hours. Clark III. (See Political Science 58.)

59. Commercial Law. Spring. M. T. W. Th., 2:00. Four credit hours. Clark III. (See Political Science 59.)

67. Public Finance and Taxation. Spring. M. T. W. Th., 11:00. Four credit hours. Pond. (See Economics 67.)

The science of public finance; the theory of public expenditure; public income and public debts; the preparation of the budget and financial administration.

Graduate Courses

101. Research in Business Finance. Winter, Spring. Two to five credit hours. Clark.

111. Public School Finance. Winter. Daily, 8:00. Five credit hours. Lambert. (See Education 111.)

The theory and practice of financing public education in the United States. The stress is placed upon revenue and distribution systems. A course in taxation should precede or parallel this course.

151, 152. Business Finance. Autumn, Winter. M. T. W. Th., 11:00. Four credit hours each quarter. Clark. (See Finance and Banking 51,52.)

153. Money and Banking. Spring. M. T. W. Th., 11:00. Four credit hours. Clark.

A study of the principles of money and banking and the exemplifications of these principles in the monetary and banking history of the United States. (See Finance and Banking 53.)

167. Public Finance. Spring. M. T. W. T., 11:00. Four credit hours. Pond. (See Economics 167.)

Marketing

*Professors Hoyt, Jenson; Associate Professors Pond, Coffman;
Assistant Professors Taylor, Birrell.*

Students majoring in this department are required to take Economics 1, and Accounting 50 or 74. It is recommended that majors take Art 14 and 15, Psychology 65, and Economics 94.

Marketing is one of the subjects comprising the composite major in **Business** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

- 14, 15, 16. **Commercial Art.** Autumn, Winter, and Spring. T. Th., 1:00. One or two credit hours each quarter. Jenson. (See Art 14, 15, 16.)
- 15a. **Textiles.** Winter or Spring. M. W. F., 10:00. Three credit hours. Staff. (See Clothing and Textiles 15.)
23. **Geography of Economic Products.** Spring. Daily, 8:00. Five credit hours. Coffman. (See Geography 23.)
32. **Marketing Fruits and Vegetables.** Spring. M. W. F., 11:00. Three credit hours.

Upper Division Courses

51. **Economics of Consumption.** Spring. M. W. F., 9:00. Three credit hours.

This class deals with the consumption problem as it affects the economic organism as a unit. Standards of measurement in the field of consumption are discussed. The consumer's viewpoint is taken with the object of studying proposed solutions for his individual consumption problems.

54. **Credits and Collections.** Autumn. M. W. F., 9:00. Three credit hours. Hoyt. (See Accounting and Business Administration 54.)

- 57. Principles of Marketing.** Autumn. M. W. F., 2:00.
Three credit hours. Hoyt. Prerequisites: Economics 1, 2.

- 58. Principles of Merchandising.** Autumn. Daily, 8:00.
Five credit hours.

This course deals with the operation of the retail store, treating specifically store organizations, lay-out, principles of salesmanship, and customer services. It is designed to meet the requirements of men and women who seek to familiarize themselves with the procedures necessary to make a quick adjustment into the working routine of the retail store. It also precedes logically further study in the field of retailing.

- 59. Advertising.** Spring. Daily, 8:00. Five credit hours.

The part advertising plays in business. Principles of advertising, including layout, media, campaigns, etc., Psychology 12 recommended.

- 61. Problems in Retail Store Control.** Winter. Daily, 8:00.
Five credit hours.

This course deals with merchandising problems as they confront the management of the retail store. Principles of mark-up, inventory methods, stock control, and merchandising plans are discussed in connection with actual case problems. Field trips are planned where working control systems are given critical examination. Prerequisite: Accounting 1.

- 62. Textiles.** Winter. T. Th., 2:00. Two credit hours.
(See Clothing and Textiles 62.) Prerequisite: Clothing and Textiles 15.) Staff.

- 63. Sales Management.** Four credit hours. (Not given this year.)

A study of methods of selecting and training and paying salesmen. The technique of making market surveys and fitting a sales organization to the needs of the market most efficiently. Also a study of the principles of salesmanship.

- 67. Agricultural Marketing.** Winter. M. W. F., 2:00.
Three credit hours. Hoyt.

An analysis of the problems of cooperative marketing of agricultural products, from the standpoints respectively of farmers, middlemen, and consumers. Prerequisites: Economics 1, 2.

- 70. Business Economics.** Four credit hours. (Not given this year.)

Application of economic principles to practical problems of individual businesses. (See Economics 70.) Prerequisites: Economics 1 and 2.

- 71. Advanced Design.** Autumn. T. Th., 1:00. Two credit hours. Birrell.

Special relationships stressed as applicable to commercial, industrial, and modern design.

- 85. Seminar in Marketing and Merchandising.** Spring. M. W. F., 3:00. Three credit hours. (Open only to students who have had Marketing 58 and Accounting 74.)

A seminar in current problems in marketing. Students are required to develop at least one major study of a marketing problem.

Graduate Courses

- 151. Research in Economics of Consumption.**

- 157. Research in Marketing.** Autumn. M. W. F., 8:00. Three credit hours. Hoyt.

- 158, 159, 161. Research in Merchandising and Advertising.** Winter, Spring. Daily, 8:00. Five credit hours.

- 163. Research in Sales Management.** Spring. M. T. W. Th., 8:00.

- 167. Research in Agricultural Marketing.** Winter. M. W. F., 8:00. Three credit hours. Hoyt.

- 185. Seminar in Marketing and Merchandising.** Spring. M. W. F., 2:00. Three credit hours.

- 200. Thesis.**

Secretarial Practice

Professors C. S. Boyle, Hoyt; Assistant Professors Taylor, Croft; Miss Christensen, Mr. Peterson, Miss Spencer..

Students majoring in this department are required to complete Economics 1, 51; Acct. and Bus. Admin. 2, 50; Finance and Banking 57; Secretarial Practice 51, 54, 55, 56, 58, 63, and 78. Recommended: Acct. and Bus. Admin. 65, 74 or 75; Marketing 59.

Secretarial Practice is one of the subjects comprising the composite major in **Business** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

- 11. Elementary Shorthand.** Autumn, Winter. Daily. Four credit hours. Staff.

An introduction and drill on theory of Gregg Shorthand. Students with previous training not permitted to take this course for credit.

- 12. Elementary Shorthand.** Autumn, Winter, Spring. Daily. Four credit hours. Staff.

A completion of the theory of Gregg Shorthand. Prerequisite: Secretarial Practice 11, or equivalent.

- 13. Elementary Shorthand Dictation.** Winter, Spring. Daily. Four credit hours. Staff.

Application of theory in dictation. Prerequisite: Secretarial Practice 12, or equivalent.

- 14. Shorthand Theory Review and Speed Building.** Autumn, Spring. Daily. Three credit hours. Staff.

Complete review of Gregg Shorthand theory with speed building practice intended to bring all students above the 80-words-a-minute level. Prerequisite: Secretarial Practice 13, or equivalent.

- 15. Shorthand Speed Building and Transcription.** Autumn, Winter. Daily. Three credit hours. Christensen and Peterson.

Speed building practice to 100 words a minute. Introduction of transcription. This course is for students who have had two years of high school training. Prerequisite: Secretarial Practice 14, or equivalent.

21. **Elementary Typewriting.** Autumn, Winter, Spring. Daily. Two credit hours. Croft.

Direct and Natural Typewriting. Students with previous training not permitted to take this course for credit.

22. **Elementary Typewriting.** Autumn, Winter, Spring. Daily. Two credit hours. Croft.

This course develops typing skill and provides practice in application for personal use. Prerequisite: Secretarial Practice 21, or equivalent. (Students with more than one-half unit of high school credit not permitted to take this course for credit.)

23. **Typewriting Speed Building.** Autumn, Winter, Spring. Daily. Two credit hours. Croft.

This course provides practice in speed and accuracy. Prerequisite: Secretarial Practice 22, or equivalent. (Students with more than one unit of high school credit not permitted to take this course for credit.)

26. **Office Machines.** Autumn, Winter, Spring. One credit hour. Croft.

This course comprises training in the operation of Burroughs, Comptometer, and Monroe calculators, also instructions on the Burroughs bookkeeping machine. It includes addition, subtraction, multiplication, and division. Practical problems are used in the practice work of the class. Prerequisite: Accounting and Business Administration 1.

31. **Business English.** Autumn, Winter. Three credit hours. Peterson.

A review of sentence structure, punctuation, spelling and business vocabulary. A study of and practice in writing business letters, in using business forms, in writing business reports, and in writing military correspondence. (This course gives alternate credit in English 4.) Prerequisite: Freshman English.

Upper Division Courses

51. **Advanced Shorthand Transcription and Speed Building.** Winter. Spring. Daily. Three credit hours. Christensen and Peterson.

An intensive transcription practice. Advanced principles and phrases with speed building to 120 words a min-

ute. Prerequisite: Secretarial Practice 15, or equivalent.

- 52. Advanced Shorthand Speed Building and Reporting.** Spring. Daily. Four credit hours. Peterson.

Specialized vocation vocabularies and reporting short-cuts. Speed building above 120 words a minute. Prerequisites: Secretarial Practice 16, or equivalent.

- 54. Office Techniques.** Autumn, Winter, Spring. Daily. Two credit hours. Croft.

Training in office typing techniques for those who desire to enter the business field. Prerequisite: Secretarial Practice 23, or equivalent.

- 55. Secretarial Training.** Winter, Spring. Four credit hours. Christensen.

A finishing course for those who desire to qualify for stenographic and secretarial positions. It includes discussion of office personality problems; practice in letter writing; preparation of legal instruments, commercial forms, and telegrams; telephone procedure; and filing. Prerequisite: Secretarial Practice 16 and 24, or equivalent.

- 58. Principles of Merchandising.** Autumn. Daily. Five credit hours. Taylor. (See Marketing 58.)

- 60. Office Organization and Management.** Spring. M. W. F. Three credit hours. Hoyt. (See Accounting and Business Administration 60.)

- 63. Personnel Administration.** Winter. Three credit hours. Hoyt. (See Accounting and Business Administration 63.)

- 78. Fundamentals of Business Education.** Spring. Three credit hours. Croft.

A course designed to lay the foundations for an understanding of the fundamentals of business education. Designed especially for all students who intend to teach any commercial subject.

- 98. Methods of Teaching Typewriting and Shorthand.** Winter. M. W. F. Three credit hours. Croft and Peterson.

A study of methods of teaching typewriting, theory of presentation, measurements, and approaches. This study is based upon speed versus accuracy first, then theories of automatization. Also Gregg shorthand with emphasis on the functional and direct methods. Consideration will be given to presentation of principles, details of theory, mechanics of dictation, tests grades, devices for motivation, and speed-building.

Economics

Professors Miller, Hoyt, Boyle, Lambert; Associate Professor Pond; Assistant Professors Taylor, Croft.

The following courses are required for a major in Economics: Economics 1, 2, 14, 74, or Accounting 75, 94.

Economics is one of the subjects comprising the composite majors in **Business** and in **Social Science** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **Economics—Introduction and Principles.** Autumn, Sec. 1, 11:00; Sec. 2, 2:00. Winter, two sections, 8:00 and 1:00; Spring, one section, 2:00. Daily. Five credit hours each quarter. Staff.

A general survey of industrial society, its structure, its institutions and operation. A brief survey of prices, money, banking, wages, interest, rent, and profits.

2. **Economics—Contemporary Economic Problems.** Winter, 2:00; Spring, 8:00. Daily. Five credit hours each quarter. Miller.

A more advanced study of the underlying principles of economics. Includes an intensive study of several contemporary economic problems, with emphasis on problems of the war and post-war worlds. Prerequisite: Course 1.

14. **Economic and Financial History of the United States.** Autumn. M. W. F., 2:00. Three credit hours. Miller.

Economic development of the United States from colonial times to the present, with emphasis upon economic integration and industrial organization since the Civil War,

Upper Division Courses

51. **Economics of Consumption.** Spring. M. W. F., 9:00. Three credit hours. (See Marketing 51.) (Not given this year.)

A study of those forces underlying and governing consumption. Prerequisites: Economics 1 and 2.

- 53. Money and Banking.** Spring. M. T. W. Th., 11:00. Four credit hours. Clark. (See Finance and Banking 53.)

- 55. Principles of Risk-Bearing.** Winter. M. W. F., 8:00. Three credit hours. (See Accounting and Business Administration 55.) (Not given this year.)

Life, health, accident, fire, property and liability insurance, and principles of risk-bearing as they apply to each classification of the insurance field. Prerequisites: Economics 1 and 2.

- 56. Transportation Problems.** Spring. M. T. W. Th., 8:00. Four credit hours. Miller. (Not given this year.)

This course deals with the growth and development of railway transportation, problems of rate determination, and the development of public regulation and railway legislation in the United States.

- 61. Labor Problems.** Autumn. M. W. F., 9:00. Three credit hours. Miller.

This course deals with the wage system, domestic industry, the factory system, the rise and growth of labor organizations. Contemporary problems in industrial and company unions will be stressed.

- 67. Public Finance and Taxation.** Winter. M. T. W. Th., 11:00. Four credit hours. Miller. (See Finance and Banking 67.)

- 70. Business Economics.** Spring. M. T. W. Th., 8:00. Four credit hours. (Not given this year.)

Application of economic principles to practical problems of individual business. Prerequisites: Economics 1 and 2.

- 74. Principles of Statistics.** Winter. M. W. F., 2:00. Three credit hours. Lambert.

Measures of central tendency, dispersion, and simple correlation. For students in education, psychology, biology, business, economics, and social sciences. Assumes reasonable competency in algebra. Any training in mathematics, including differential calculus, will be an advantage to the student.

- 75. Business and Economic Statistics.** Spring. M. W. F., 9:00. Three credit hours each quarter. Hoyt.

Fundamental methods of statistics in business and economic applications. Estimating future business; economic forecasting; fluctuations of business.

- 76. Social Control of Business.** Autumn. M. W. F., 11:00. Three credit hours. Miller.

General survey of governmental activities affecting business. The course aims to develop an understanding of the economic basis for government regulations, and the probable limits and difficulties inherent in our existing economic system in extending such regulation. Prerequisites: Economics 1 and 2.

- 78. International Economic Policies.** Winter. M. W. F., 2:00. Three credit hours. Miller. (Not given this year.)

A survey with particular reference to the United States, of the international aspects of the economic policies and activities of governments.

- 94. Advanced Economics.** Winter. Daily, 10:00. Five credit hours.

Advanced course in economic theory with stress upon production principles and price theory. Prerequisites: Economics 1 and 2.

- 95. Advanced Economics.** Spring. Daily, 10:00. Five credit hours.

Continuation of Economics 94, with stress upon price theory and principles of distribution. Prerequisite: Economics 94.

- 99. History of Economic Thought.** Spring. Daily, 8:00. Five credit hours. Miller.

The development of economic thought from early times to the present. A brief survey up to about 1750, but chief emphasis will be given to Smith, Ricardo, Malthus, and Mill.

Graduate Courses

- 153. Money and Banking.** Spring. M. T. W. Th. Four credit hours. (See Finance and Banking 153.) Clark.

- 156. Transportation Problems.** Spring. M. T. W. Th., 1:00. Four credit hours. (Not given this year.)

161. **Labor Problems.** Autumn. M. W. F., 9:00. Three credit hours. Miller.
167. **Public Finance.** Spring. M. T. W. Th., 11:00. Four credit hours. Miller. (See Finance and Banking 167.)
178. **International Economic Problems and Policies.** Winter. M. W. F., 2:00. Three credit hours. Miller. (Not given this year.)
194. **Advanced Economics.** Autumn. Daily, 8:00. Five credit hours.
Advanced course in economic theory with application to present day economic problems. Prerequisites: Economics 1 and 2.
195. **Advanced Economics.** Winter. Daily, 8:00. Five credit hours.
Advanced course. Prerequisites: Economics 1, 2 and 94.
197. **Research.** Time and credit to be arranged. Staff.
199. **History of Economic Thought.** Spring. Daily, 8:00. Five credit hours. Miller.
200. **Thesis.**

Agricultural Economics

*Professor Hoyt; Associate Professors Pond, Coffman;
Assistant Professor Taylor.*

The following courses are required for a major in Agricultural Economics: Economics 1, 2, 94 and 74, or Accounting 75; Agricultural Economics 30, 60, 67, 81 and 82. Credit for Economics 74 and 94 will apply toward a major in Agricultural Economics.

Lower Division Courses

30. **Principles of Agricultural Economics.** Autumn. M. W.

F., 9:00. Three credit hours. Prerequisites: Economics 1 and 2.

- 32. Marketing Fruits and Vegetables.** Spring. M. W. F., 11:00. Three credit hours. (See Horticulture 32.)

Upper Division Courses

- 53. Rural Sociology.** Spring. M. W. F., 11:00. Three credit hours. (See Sociology 53.)

A survey of social conditions in the rural life of America, with special reference to those social processes which are in operation at the present time.

- 57. Principles of Marketing.** Autumn. M. W. F., 2:00. Three credit hours. Hoyt. (See Marketing 57.)

- 60. Farm Management.** Winter. M. W. F., 1:00. Three credit hours. (See Agronomy 60.)

- 61. Conservation and Land Utilization.** Winter. M. W. F., 11:00. Three credit hours. Coffman. (See Geography 61.)

- 67. Agricultural Marketing.** Winter. M. W. F., 10:00. Three credit hours. Hoyt. (See Marketing 67.) (Not given this year.)

- 81. Land Economics.** Winter. M. W. F., 9:00. Three credit hours.

Principles relating to the utilization, tenure, and conservation of land resources. Prerequisite: Agricultural Economics 30.

- 82. Agricultural Finance.** Spring. M. W. F., 2:00. Three credit hours. (Not given this year.)

A study of agricultural credit, with special reference to existing financial organizations and their relation to agriculture. Prerequisite: Agricultural Economics 30.

- 91. Western Land Problems.** Spring. M. W. F., 9:00. Three credit hours.

A survey of the outstanding land problems of the western states, particularly those of the Rocky Mountain area. Special class reports by students will be required.

- 92. American Agricultural Reform.** Spring. M. W. F., 9:00. Three credit hours. (Not given this year.)

A review of the agrarian movements for economic and social reform in America, including recent and current programs for farm relief.

93. **Economic History of Agriculture.** Spring. M. W. F., 9:00. Three credit hours. (Not given this year.)

The development of agriculture from its beginning in the Old World to the present time. Historical background of contemporary agricultural problems.

Graduate Courses

181. **Land Economics.** Winter. M. W. F., 9:00. Three credit hours.
182. **Agricultural Finance.** Spring. M. W. F., 2:00. Three credit hours. (Not given this year.)
191. **Western Land Problems.** Spring. M. W. F., 9:00. Three credit hours.
192. **American Agricultural Reform.** Spring. M. W. F., 9:00. Three credit hours. (Not given this year.)
200. **Thesis.**

Education

Professors Lambert, H. Peterson, Lloyd, Law, Woolf, Snell, Hart, Holbrook, R. B. Swenson, E. M. Jenson; Professors Emeritus A. N. Merrill, W. H. Boyle; Associate Professors Sudweeks, Bryner; Assistant Professors W. F. Hanson, Maeser, Hamond, Clarke, Birrell; Mr. C. L. Jensen Mrs. Fisher, Mr. Lee, Mr. Tuttle, Mr. Croft, Mrs. Strong, Mr. Clinger, Mrs. Booth, Mrs. Hart, Mr. Bingham, Miss Call, Mr. Booth, Mrs. Caine, Mr. J. R. Clark III, Miss Reid, Mrs. A. C. Smith, Mr. Miller, Mr. McAllister.

With the approval of the major professor, credit in courses in any of the educational departments may be offered to fill major requirements. Philosophy of Education 93 is a required course in all departments in the College of Education, and should be taken toward the end of the Senior year.

General Education

The courses in this division are designed for all students majoring in the other departments of the College of Education and for those who may be registered in the other colleges of the University, but who desire to qualify for a state teaching certificate. A liberal offering from this division is a prerequisite to the courses listed in the graduate division of the college.

- 50. Periodical Educational Literature.** Autumn, Winter, Spring. T. Th., 10:00. Two credit hours.

A study of current educational periodicals; acquaintance with some of the valuable journal publications. Lectures, discussions, and reports. For elementary and high school teachers.

- 52. First Course in Statistical Methods.** Winter, M. W. F., 2:00. Three credit hours. Lambert.

Measures of central tendency, dispersion, and simple correlation. For students in education, psychology, biology, business, economics, and social sciences. Assumes

reasonable competency in algebra. Any training in mathematics, including differential calculus, will be an advantage to the student.

- 53. First Course in General School Organization and Administration.** Autumn, Winter, or Spring. M. W. F., Sec. 1, 9:00. Sec. 2, Autumn, 10:00. Three credit hours. Boyle, Lambert.

Considers the general way in which state and local school units are organized to conduct public education. Considers functions and powers of state departments, local school boards, and administrative officers. Stresses the way in which teachers adjust to the administrative system, and shows how teachers are affected by contracts, salaries, ratings, leaves, transfers, promotions, etc. Shows the opportunities for teachers to contribute to good school administration. Required of all elementary and secondary school teachers. Meets Utah state requirements for a course in school organization. (Ed. Adm. 93 also meets this requirement.)

- 54. Educational Tests and Measurements.** Winter, M. W. F., 11:00. Three credit hours. Law.

A study of objective and standardized testing. Students in this course will undertake an actual program of testing, scoring, tabulating, interpreting results, and planning remedial instruction with the use of Training Schools as a laboratory.

- 57. Materials and Methods in Safety Education.**—Autumn, Winter, Spring. T. Th. Two credit hours. Hart.
(See Health 57.)

- 63. Educational Psychology.** Autumn, Winter, or Spring. M. W. F., 2:00. Three credit hours. Woolf.

A brief consideration of certain important phases of the psychology of secondary Education. The laws of economical learning, individual differences, and psychology of school subjects.

- 71. Education Through Play Activities.** Winter. M. W. F., 11:00. Three credit hours. Holbrook.

The theory of play considered biologically, historically and currently, in the educational processes.

- 75. Visual Education.** Winter. T. Th., Two credit hours.

An introductory course familiarizing the student with the general type of visual aids, and including a study of

general principles, projection equipment and new developments in visual aids.

78. **Fundamentals in Business Education.** Spring. M. W. F., 9:00. Three credit hours. (See Office Practice 78.)
98. **Methods of Teaching Typewriting and Shorthand.** Three credit hours. (See Office Practice 98.)

Educational Administration

Professor Lambert

52. **First Course in Statistical Methods.** Winter. M. W. F., 2:00. Three credit hours. Lambert.

Measures of central tendency, dispersion, and simple correlation. For students in education, psychology, biology, business, economics, and social science. Assumes reasonable competency in algebra; any training in analytical geometry and differential calculus will be a distinct advantage to the student.

53. **First Course in General School Organization and Administration.** Autumn, Winter, Spring. M. W. F., Three credit hours. Sec. 1, 9:00; Sec. 2, 10:00. Lambert, Boyle.

The general system for administering public education. Powers of legislatures, state boards of education, local school boards, and administrative officers. How the teacher contacts the administrative system and adjusts to it. Problems of contract, salary, promotion, retirement. The school law meets Utah certificate requirements. (Educational Administration 93 also meets this state requirement.)

64. **Achievement Testing.** Autumn or Spring. M. W. F., 8:00. Three credit hours.

For high school and elementary school teachers, satisfying state requirements. Considers standard tests, old-type tests and new-type tests. Training in giving tests, scoring, tabulating and interpreting results, and in planning remedial measures.

- 85. Educational Supervision.** Spring. Three credit hours. Jenson.

The evaluation and the improvement of teaching. For students who have foundational work in psychology, educational psychology, school organization, and classroom theory and procedures. Assumes training in curriculum organization.

- 87. Old and New Type Examinations.** Winter. M. W. F., 9:00. Three credit hours.

The essay type examination, its improvement and its uses. The new-type examination with its forms, uses and reliability.

- 88. Administration of Student Personnel Service.** Autumn. M. W. F., 9:00. Three credit hours. Lloyd.

Attention is given to the administrative organization of Personnel Service. A consideration of diagnostic and remedial techniques with students. The course includes a study of student health service, employment, curricular and extra-curricular activities, technique of interviewing and student records.

- 93. The Organization and Administration of Public Schools.** Autumn. Daily. 9:00. Five credit hours. Lambert.

Ways in which public schools are controlled and ways in which states, counties, cities and local districts are organized for conduct of public education. The foundation course for majors in administration. Elective for advanced students in other departments of education. (Meets Utah certificate requirements.)

- 96. The Work of the School Principal.** Spring. M. W. F., 9:00. Three credit hours. Lambert.

Administering a single school. Grade organization, schedules, staff selection and placement, rating, reports, supply administration, pupil guidance, and public relations. For men and women preparing for administrative opportunities.

Elementary Education

Professors Law and Peterson

A major in Elementary Education (33 to 45 quarter hours) should include Educational Psychology 63 or 74, General Education 53, Philosophy of Education 93, Elementary Education 60, 81, 82, 84, 90, and 41 or 91. Either Elementary Education 92 or General Education 54 as a recommended elective should also be included if possible. Other electives for the major may be selected from the various departments in Education and Psychology.

Major students in Elementary Education should, with the approval of the major professor, select a minor which is applicable to elementary school teaching.

Supporting fields must include two hours in Safety Education (Health 57) and three hours in Health Education (Health 58), three hours in Speech Correction with children, four hours in Children's Literature, four hours in games and rhythms for elementary school children (Physical Education 59 and 60), and Library 63. A course in piano music for teachers is highly recommended for those who do not already play the piano. Instrumental Music 41 provides group instruction for beginners on the piano, and is intended to help meet demands for elementary school teachers who have learned to play the piano. The remaining work in supporting fields is to be selected with the approval of the head of the department of Elementary Education, selection to be made with a view to strengthening and broadening the academic and cultural background needed by the teacher in the elementary school. Elementary teachers need broad understanding regarding children and great versatility in many subject matter fields to a much greater extent than they need extensive academic specialization in a single subject. However, the desired courses should be selected so as to provide at least thirty hours in a given area of interest, such for example, as language arts or science or social science or some other area included in the elementary school, and also eighteen hours in another elementary school area. The degree minor serves as one of these areas.

The group requirements for the degree of Bachelor of Science or Bachelor of Arts are listed elsewhere in the catalogue. In filling these group requirements, the student should be guided by the following: The Biological Science group should in-

clude a course in either Bacteriology, Botany, or Zoology, and a course in Nature Study for Elementary Teachers (Botany 5 or Zoology 77.) The Physical Science group should include a course in Earth Science and other courses needed to enlarge the teachers' background in science. The Social Science group should include courses in Sociology, Economics, Political Science and History. Western History is especially recommended (History 82 or its equivalent, also U. S. History.) The freshman and sophomore years should be devoted largely to building up a broad and rich academic background, leaving the professional work in Education for the junior and senior years, with the possible exception of Elementary Education 60 which may be taken during the Sophomore year.

Lower Division Course

41. **Art for Elementary School Teachers.** Autumn, Winter, Spring. M. W. F., 3:00. Three credit hours. Jenson and Fisher.

Materials and procedures for stimulating and guiding child development in the various phases of art in the elementary school. Attention will be given to the relationship of art to the entire school program. (See Art 41.)

Upper Division Courses

54. **Educational Tests and Measurements.** Autumn, M. W. F., 9:00. Three credit hours. Law.

A study of objective and standardized testing. Students in this course will undertake an actual program of testing, scoring, tabulating, interpreting results, and planning improvements with the use of the Training School as a laboratory.

56. **Industrial Arts and Crafts for Elementary Teachers.** Autumn, Spring. Wednesday. 3:00 to 5:00. Two credit hours. Call.

A practical course in handicrafts. Students will participate in simple pottery-making, book-making, spinning, weaving, dyeing, and other craft processes that can be carried on by children in the elementary school. (There will be a small fee for materials.)

57. **Materials and Methods in Safety Education.** Autumn, Winter, Spring. T., Th. Two credit hours. Hart.

- 59. Arts and Crafts for Early Childhood.** Winter. Wednesday. 3:00 to 5:00. Two credit hours. Call.

A practical course in handicrafts for teachers in kindergarten and first grade. (There will be a small fee for materials.)

- 60. Child Growth and Development for Elementary Teachers.** Autumn and Winter, M. W. F., 10:00. Laboratory work to be arranged. Three credit hours. Peterson and staff.

The classwork and study in the field of child development will be based upon observation of child behavior. This course meets a state requirement for elementary certification and may be taken by sophomores, juniors, or seniors, preceding the courses in curriculum and methods.

- 68. Juvenile Literature.** Autumn, Spring. T. Th., 8:00. Two credit hours. Hammond.

A study from the literary and educational points of view of the best literature available for children.

- 69. Juvenile Literature.** Winter, T. Th., 8:00. Two credit hours. Hammond.

A study of literature to give a basis of selection, appreciation and presentation of the best and most suitable material for the elementary school.

- 81. Elementary Curriculum and Methods.** Autumn. Daily. 9:00. Five credit hours. Peterson and Law.

This course deals with the curriculum and the materials of the elementary school together with methods in elementary education. It must be taken before or parallel with Elementary Education 84. Required for certification. Prerequisite: Fifteen hours of selected work in education.

- 82. Elementary Curriculum and Methods.** Winter. Daily. 9:00. Five credit hours. Peterson and Law.

This is a continuation of Elementary Education 81. It should be taken parallel with Elementary Education 84. Required for certification. Prerequisite: Elementary Education 81.

- 83. Elementary Curriculum and Methods.** Spring. M. W. F., 9:00. Three credit hours. Peterson and Law. Limited to seniors only.

This course is designed especially for secondary teachers who wish to get some training on the elementary

school level. Secondary teachers who qualify also for elementary teaching certificates are required to complete this course. Prerequisites: fifteen hours in education.

- 84. Elementary and Kindergarten Training.** Autumn, Winter, and Spring. Daily, 10:00-12:00, or 1:00 to 3:00. Twelve credit hours. Six hours each quarter. Law, Peterson, and Staff.

This is essentially a laboratory course affording opportunity for practice teachers to apply the principles of teaching developed in Elementary Education 81 and 82. Teachers should reserve the 4:00 o'clock hour on Tuesdays and Thursdays for supervisory meetings. Prerequisites: fifteen hours of selected educational work, including Elementary Education 60, Education 53, and Psychology 63 or 74, and passing of subject matter tests administered by the College of Education. Elementary Education 81 and 82 should precede or parallel this course.

Application for elementary practice teaching must be made to the head of this department at least three months prior to registering for this course. Registration is contingent upon the granting of the application by a committee in the department which has been appointed for the purpose. The facilities of the training school are limited. Only those regularly enrolled in the College of Education may be admitted to elementary practice teaching.

- 90. Music for Elementary School Teachers.** Autumn, Winter, Spring. M. W. F., 8:00. Three credit hours.

Materials and procedures for stimulating and guiding child development in the various phases of music in the elementary school. Attention will be given to the relationship of music to the rest of the school program. Prerequisite: two credit hours in theory of music. (Theory of Music 1 or 11 or the equivalent.) (See Theory of Music 90.)

- 92. Early Childhood Education.** Spring. M. W. F., 10:00. Three credit hours. Peterson.

Problems of early elementary education will be considered. A study of the activities, subject matter and concrete materials which should form the basis of the work with young children. Classroom observation required.

- 96. Supervision of Elementary Education.** Spring. M. W. F., 11:00. Three credit hours. Peterson and Law.

A study of the problems involved in elementary school supervision in the light of present day practice and theory in this field. (Accompanied by laboratory work.)

Philosophy of Education

Professor Lloyd

Upper Division Courses

- 71. History of Educational Thought.** Autumn. M. T. W. Th., 1:00. Four credit hours. Lloyd. (Not given this year.)

A critical study of the contributions of the outstanding educational thinkers from the early Greeks to the present, and an evaluation of the various philosophies. Special emphasis will be given to the writings of twelve significant educators from Plato to Dewey.

- 72. History of Education in America.** Winter. M. W. F., 9:00. Three credit hours. Lloyd.

The rise and development of the American educational system as it has been affected by changes in American life from the colonial period to the present times.

- 81. History of Philosophy.** Autumn. M. W. F., 2:00. Three credit hours. R. B. Swenson.

A history of the rise and development of philosophy in the Greek, Graeco-Roman, medieval, renaissance, eighteenth century, and modern periods. Stress is laid upon an appreciation of the outstanding philosophers of the various schools of thought and their relation to the intellectual trends and problems of the present.

- 85. Research In Philosophy of Education.** Any quarter. Lloyd.

A maximum of two credit hours for research, and reports in the Philosophy of Education. Reading may cover materials in which regular courses are not offered. Registration by consent of the instructor.

- 87. Methods In Character Education.** Winter. M. W. F., 11:00. Three credit hours. Lloyd.

A study of various methods and techniques in character

education that are now in use in the United States and an evaluation of the educational philosophy upon which each of these rests. Special attention will be given to the newer trends in this field.

88. **Administration of Student Personnel Service.** Autumn, M. W. F., 10:00. Three credit hours. Lloyd.

Attention is given to the administrative organization of Personnel Service. A consideration of diagnosis and remedial techniques with students. The course includes a study of student health service, employment, curricular and extra-curricular activities, techniques of interviewing and student records.

90. **Social Ethics.** Spring. M. T. W. Th., 8:00. Four credit hours. Lloyd.

This course deals with ethical theory as applied to our industrial and social problems; the breakdown of Puritan ethics; individualism, Christian ethics, international good will and world peace.

93. **Philosophy of Education.** Autumn and Spring. M. W. F. 9:00. Winter, M. W. F., 10:00. Three credit hours. Lloyd.

This course is designed primarily to assist senior students in the achievement of a basic philosophy of education, growing out of the integrated experiences of university life. Special attention will be given to the American tradition in education, the qualities of an educated individual, and the role of the college graduate in the modern social order.

Secondary Education

Professor Woolf; Professor Emeritus Merrill

Students in the department of Secondary Education are required to qualify for either a teaching major and a teaching minor, or for a composite teaching major. For details concerning these refer to the catalogue under the heading "Colleges." The head of each academic department will furnish additional information concerning the department requirements for the teaching major. The deans of the colleges or the heads of the academic departments concerned will furnish detailed information concerning the requirements for a composite major.

Thirty hours in Education are required for the General Secondary Certificate. These should include General Education 53, and 63; Secondary Education 81, 84, 94, and 96, or their equivalents. The additional hours must include Philosophy of Education 93, and an election from any of the departments in the College of Education or Psychology to equal or exceed the required 30 hours.

Upper Division Courses

- 81. General Secondary Methods.** Autumn, Winter, or Spring. M. T. W. Th., 11:00. Four credit hours. Woolf. Educational Psychology should be taken as a prerequisite.

This course is designed to introduce students to practice teaching and should be taken therefore before practice teaching begins. Emphasis is given to general methods and procedures applicable to teaching in secondary schools. Directed observations of high school classes will be made. Students will be given experience in unit planning in their particular fields.

- 84. Secondary Education.** Autumn, Winter, or Spring. Demonstration and consultation. T. Th., 3:00. Practice periods to be arranged. Eight credit hours, preferably four hours in each of two quarters. Woolf, Merrill, and Staff.

This is a course in practice teaching under supervision. Approximately two quarters of participation and responsible class room teaching will be required. Instruction in special methods for teaching specific subject matter will be given by the critic teacher on Tuesdays and Thursdays of each week at 3:00 in the following subjects: Art, Biology, English, Foreign Language, Home Economics, Mathematics, Mechanic Arts, Music, Secretarial Practice, Physical Education, Physical Science, Social Science. Prerequisites: Fifteen hours of selected educational work including at least three-fourths of the teaching major, and the consent of the instructor concerned with the student's teaching major. Application for this course must be made at least three months prior to the date of beginning practice teaching and, preferably, not later than the end of the second quarter of the junior year. Practice teaching periods to be arranged.

- 87. Old and New Type Examinations.** Winter. M. W. F., 9:00. Three credit hours.

An essay type examination, its improvement and uses. The new type, uses, forms, and reliability.

89. **Juvenile Sociology.** Autumn, Winter, or Spring. T. Th., 8:00. Two credit hours. Boyle.

This course deals with the educational problems of the adolescent, as related to the home, the school, industry, the community, and his own group. (See Sociology 71.)

91. **The High School Curriculum.** Winter. M. W. F., 11:00. Three credit hours. Merrill.

The principles governing the organization of the high school curriculum. The evaluation of objectives of the course of study, and of the activity phase of the present high school curriculum.

94. **Educational and Vocational Guidance.** Autumn or Spring. M. W. F., 11:00. Three credit hours. Merrill.

A consideration of the principles of educational and vocational guidance and early vocational experience as factors in determining the choice of an occupation; and the modification of the high school curriculum to facilitate vocational choice.

95. **The Senior High School.** Spring. M. T. W. Th., 8:00. Four credit hours. Merrill. (Not given this year.)

This course deals with the problems of the senior high school, especially those concerned with the justification and the modification of the present curriculum.

96. **Articulation of School Units.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours. Merrill.

This course meets the requirements of the Utah State Board of Education concerning the interpretation and articulation of the various administrative units. It deals with the review of the functions of the various units, the present trends of the curricula and the relation of the work of one unit of administration to the other.

Graduate Work In Education

An adequate knowledge of undergraduate courses in Education is a prerequisite for graduate work in the field of Education. The graduate major professor will determine if a student is sufficiently qualified to undertake graduate study in a specific department in this field.

Credit in Educational Administration 118 (Research and

Thesis Writing), or an equivalent course, is required of all candidates for the Master's degree in any department in Education.

A student who plans to complete the requirements for the Master's degree in Education must choose his major work in one of the four departments listed below. His major professor must be a member of the staff responsible for graduate work in the department in which the student is majoring. The major professor and two additional members of the University faculty chosen by him will constitute the student's thesis committee. This committee will have the responsibility of directing the preparation of the thesis.

Students should read carefully the "Requirements for the Master's Degree" as found in the section of the catalogue devoted to the Graduate School.

A student's program of study should be formulated with the advice of his major professor and must receive the approval of the major professor and the dean of the Graduate School.

Educational Administration

Professor Lambert

Courses from other departments can be accepted by arrangement.

101-110. Independent Readings in Organization, Administration and Supervision. Any quarter. Time and credit arranged. Lambert.

An individual study plan by which students may study under direction in areas in which courses are not offered or in fields of interest beyond the courses available. The plan may be used to complete a program in harmony with the student's needs, to build up backgrounds for more advanced courses or to complete individual projects related to the student's professional work. Course consists of planning a reading and study program, conferring with the instructor, preparing reports, and demonstrating mastery when the work is completed. Permission to register is granted by the instructor.

111. Public School Finance I. Winter. Daily, 8:00. Five credit hours. Lambert.

The theory and practice of financing public education in

the American states. Emphasis in this course is put upon revenue systems. An enlarged reading program is part of the course. Educational Administration 73 or its equivalent is a prerequisite. A course in taxation should precede or parallel this course.

- 112. Public School Finance. II.** Winter. Daily. Five credit hours. Lambert.

The business management of school systems. Expenditures, costs, purchases, accounting, and the school budget. Educational Administration 73, or its equivalent, is a prerequisite. Given each alternate year.

- 113. Personnel Problems.** Winter. M. T. W. Th., 9:00. Three credit hours. Lambert.

Problems of the teaching staff; training, selection, assignment, promotion, retirement. Contract, tenure, salaries. Given each alternate year. Educational Administration 73 is a prerequisite.

- 114. The Work of the School Principal.** Spring. M. T. F., 9:00. Three credit hours. Lambert.

The work of the school principal and the supervisor. Educational Administration 73 and work in educational psychology and teaching methods are prerequisites.

- 116. Public School Building and Transportation Programs.** Spring. M. T. W. Th., 8:00. Five credit hours. Lambert.

How to project a school building program and to finance it. How to integrate the curriculum, the school organization, the buildings, and the school transportation system. Management and care of school plants. Educational Administration 73 or its equivalent is a prerequisite.

- 118. Introduction to Research and Thesis Writing.** Autumn. M. W. F., 2:00. Three credit hours. Lambert.

Two lectures each week with individual conferences and readings. A course in the principles of scientific investigation and the acceptable procedures of research. Specific assistance in the preparation of the Master's thesis. Given for all of the graduate students in the University. Required of all candidates for the Master's degree in Education.

- 150. Seminar in Education.** Any quarter. Time to be arranged.

A seminar in educational research is organized any quarter for five or more graduate students. It provides

an opportunity for qualified workers to extend their studies of educational problems and for graduate students to secure aid in pursuing and reporting their investigations.

- 154. Educational Tests and Measurements.** Winter. M. W. F., 9:00. Three credit hours.

A study of objective and standardized testing. Students in this course will undertake an actual program of testing, scoring, tabulating, and interpreting results, with the use of the Training School as a laboratory.

- 164. Achievement Testing.** Autumn or Spring. M. W. F., 8:00. Three credit hours.

A course in the use of tests of achievement and intelligence. Standard tests, old-type, and new-type. Training in selecting, giving, scoring, and interpreting tests and in planning remedial measures.

- 200. The Master's Thesis.** Any quarter. Credit to be arranged. Lambert.

Elementary Education

Professors Law and Peterson

- 130-135. Independent Readings in Elementary Education.** Maximum of two credit hours in any one quarter. Law.

Qualified students may read in fields not adequately covered in their course work and make an organized report of the information gained. This reading should be planned to meet the needs of the student's graduate program. Registration by consent of instructor.

- 144. Advanced Practice Teaching for Elementary Schools.** Autumn, Winter, Spring. Daily, 9:00-11:00, or 1:00-3:00. Three to six credit hours. Law and Peterson.

Designed for experienced teachers, supervisors, and administrators who desire further study and experience in working with children. Application for this work should be made in advance. Students may register for the course only upon the approval of the chairman of the Department of Elementary Education.

- 150. Seminar in Elementary Education.** Any quarter. Time to be arranged. Law.

A seminar in educational research is organized any quarter for five or more graduate students. It provides an opportunity for qualified workers to extend their studies of educational problems and for graduate students to secure aid in pursuing and reporting their investigations.

- 151. Science Teaching in the Elementary School.** Three credit hours. Law and Kotter. (Not given this year.)

A study of science as an essential part of the curriculum. Includes the use of content from the physical and biological sciences.

- 154. Educational Tests and Measurements.** Autumn. M. W. F., 11:00. Three credit hours. Law.

A study of objective and standardized testing. Students in this course will undertake an actual program of testing, scoring, tabulating, and interpreting results, with the use of the Training School as a laboratory.

- 157-159. Research in Elementary Education.** Any quarter. Two credit hours. Law.

Qualified students may pursue research in the field of elementary education and may receive credit upon the satisfactory completion of a paper embodying the results of such research. Registration by consent of the instructor.

- 160. Child Growth and Development for Elementary Teachers.** Autumn, Winter. M. W. F., 10:00. Laboratory work to be arranged. Three credit hours. Peterson.

The classwork and advanced study in the field of child development will be based upon observation of child behavior.

- 161. Teaching Language Arts in the Elementary School.** Three credit hours. Maeser. (Not given this year.)

Considers curriculum materials and procedures involved in teaching the language arts in relation to all phases of student experience.

- 179. Recent Developments in the Teaching of Reading.** Spring. Three credit hours. Law and Peterson. (Not given this year.)

A study of theory and practice in the teaching of reading with special attention to the results of recent research in this and related fields.

- 182. Elementary School Curriculum and Methods.** Winter.

Daily, 9:00. Five credit hours. Law and Peterson.

This course deals with the curriculum and the materials of the elementary school together with methods in elementary education. Elementary Education 81 or its equivalent is a prerequisite.

183. **Recent Trends in Elementary Education.** Spring. M. W. F., 9:00. Three credit hours. Law and Peterson.

A study of modern practice and theory in the field of elementary school teaching. Prerequisite: 20 hours in education.

186. **Curriculum Building in Elementary Schools.** Winter. M. W. F., 9:00. Three credit hours. Law and Peterson.

A study of basic principles, procedures, materials and other considerations involved in curriculum building in elementary schools. This course is designed to assist in meeting the state requirements for a certificate in elementary school supervision, and to provide opportunity for advanced study in this field by experienced teachers, supervisors, and administrators.

192. **Early Childhood Education.** Spring. M. W. F., 10:00. Three credit hours. Peterson.

Problems of early elementary education will be considered. A study of the activities, subject matter and concrete materials which should form the basis of the work with young children. Class room observation required.

196. **Supervision of Elementary Education.** Spring. M. W. F., 11:00. Three credit hours. Peterson and Law.

A study of the problems involved in elementary school supervision in the light of present day practice and theory in this field. (Accompanied by laboratory work.)

200. **The Master's Thesis.** Any quarter. Law.

Credit of four to six hours is given upon the completion of an acceptable thesis that embodies the results of independent research upon a significant problem in some field of concentration. Students should read the section of the catalogue that contains the requirements of the graduate school. Credit in Educational Administration 118, or an equivalent course, is a prerequisite.

Philosophy of Education

Professor Lloyd

- 118. Introduction to Research and Thesis Writing.** Autumn. M. W. F., 2:00. Three credit hours. Lloyd. (Not given this year.)

Two lectures each week with individual conferences and readings. A course in the principles of scientific investigation and the acceptable procedures of research. Specific assistance in the preparation of the Master's Thesis. Given for all the graduate students in the University.

- 171. History of Educational Thought.** Four credit hours. Lloyd. (Not given this year.)

A critical study of the contributions of the outstanding educational thinkers from the early Greeks to the present and an evaluation of the various philosophies. Special emphasis will be given to the writings of twelve significant educators from Plato to Dewey.

- 172. History of Education in America.** Winter. M. W. F. 9:00. Three credit hours. Lloyd.

The rise and development of the American educational system as it has been affected by changes in American life from the colonial period to the present time.

- 173. Education in the Social Order.** Spring. M. T. W. Th., 11:00. Three credit hours. Lloyd. (Not given this year.)

The school as a social institution, with special emphasis upon its relation to social, economic, and political change. The effect of these changes upon educational practice and philosophy of education.

- 181. History of Philosophy.** Autumn. M. W. F., 2:00. Three credit hours. R. Swensen.

A history of the rise and development of philosophy in the Greek, Graeco-Roman, medieval, renaissance, eighteenth century, and modern periods. Stress is laid upon an appreciation of the outstanding philosophers of the various schools of thought and their relation to the intellectual trends and problems of the present.

- 184, 185. Research in Philosophy of Education.** Any quarter. Lloyd.

A maximum of two credit hours for research and reports in the Philosophy of Education. Reading may cover materials in which regular courses are not offered. Registration by consent of the instructor.

- 187. Methods in Character Education.** Winter. M. W. F., 11:00. Three credit hours. Lloyd.

A study of various methods and techniques in character education that are now in use in the United States and an evaluation of the educational philosophy upon which each of these rests. Special attention will be given to the newer trends in this field.

- 188. Administration of Student Personnel Service.** Autumn. M. W. F., 10:00. Three credit hours. Lloyd.

Attention is given to the administrative organization of Personnel Service. A consideration of diagnostic and remedial techniques with students. The course includes a study of student health service, employment, curricular and extra-curricular activities, technique of interviewing, and compilation of student records.

- 190. Social Ethics.** Spring. M. T. W. Th., 8:00. Four credit hours. Lloyd.

This course deals with ethical theory as applied to our industrial and social problems, the breakdown of Puritan ethics, individualism, Christian ethics, international good will, and world peace.

- 193. Philosophy of Education.** Autumn and Spring. M. W. F., 9:00. Winter, M. W. F., 10:00. Three credit hours. Lloyd.

This course is designed primarily to assist senior students in the achievement of a basic philosophy of education, growing out of integrated experiences of university life. Special attention will be given to the American tradition in education, the qualities of an educated individual, and the role of the college graduate in the modern social order.

- 200. The Master's Thesis in Education.** Any quarter. Lloyd. Credit of four to six hours is given upon the completion of an acceptable thesis that embodies the results of independent research upon a significant problem in some field of concentration. Students should read the section of the

catalogue that contains the requirements of the graduate school. Credit in Education 118 or an equivalent course is a prerequisite.

Secondary Education

Professor Woolf; Professor Emeritus Merrill.

- 122. Problems in Part-Time Education.** Autumn, Winter, or Spring. T. Th. Time to be arranged. Two credit hours. Merrill.

This course deals with the methods and the problems of part-time education: the character of the population to be educated, methods of teaching in part-time classes, job analysis, and course organization.

- 140-50 Research in Secondary Education.** Autumn, Winter, or Spring. Merrill.

Maximum of three credit hours is allowed for the completion of an acceptable paper that embodies the results of independent research upon some problem in secondary education. Registration by consent of the instructor.

- 179. Development of Secondary Schools and Current Theories and Practices.** Autumn, Winter, or Spring. Time to be arranged. Maximum of three credit hours each quarter. Woolf.

Independent readings and individual conferences will be planned to permit graduate students to become familiar with important literature in the field of Secondary Education. Registration upon consultation with instructor.

- 180. Secondary School Subjects.** Autumn, Winter, or Spring. Maximum of three credit hours each quarter. Woolf.

Independent readings and individual conferences designed to acquaint the student with studies pertaining to improved methods in teaching secondary school subjects. Registration upon consultation with instructor.

- 191. Secondary School Curricula.** Winter. 11:00. Four credit hours. Merrill.

The theory of high school curricula. Particular atten-

tion is given also to an evaluation of the subject matter and student activities now required of students in high schools of Utah.

- 194. Educational and Vocational Guidance.** Autumn, or Spring. M. W. F., 9:00. Three credit hours. Merrill.

A consideration of the principles of educational and vocational guidance and early vocational experiences as factors in determining the choice of an occupation; modification of the high school curriculum to facilitate the vocational choice.

- 195. The Senior High School.** Spring. M. T. W. Th. Time to be arranged. Four credit hours. Merrill.

This course deals with the problems of the senior high school, especially those concerned with modifications of present practices.

- 196. Articulation of School Units.** Autumn or Spring. M. W. F., 10:00. Three credit hours. Merrill.

This course deals with the review of the functions of the various units, present educational trends, and the relation of one unit of administration to another.

- 200. The Master's Thesis.** Any quarter. Merrill.

Credit of four to six hours is given upon the completion of an acceptable thesis that embodies the results of independent research upon a significant problem in some field of concentration.

English

Professors Christensen, Rowe, Young; Professor Emeritus J. M. Jensen; Assistant Professors Carroll, Britsch, Tanner; Mrs. Rich, Mr. Rice, Mr. Taylor, Miss Waterstradt.

Scope of Instruction

The English department offers courses in English language, English literature, American literature, and general and comparative literature. For convenience the courses in general and comparative literature are brought together.

Requirements for the Degree of Bachelor of Arts

Students who elect their major in English are required to complete thirty-six hours of work in English in addition to courses 1, 2, 3. The following program of study in English is prescribed: 15, 16, 71, 72, 73, 74, 75 (five required, with 15 and 16 considered as equal to one;) courses 80, 83, 84, 85, 86, 87, 88, 89 (two required); 81, 95, 97 (one required); courses 12 and 82.

Students may, however, make substitutions as follows: courses 60 for 72; 90 for 74; 91 for 75; 24 for 82; Journalism 52 or 57 for 12.

Twenty-four hours in one or more foreign languages are required. The following courses in other departments are recommended: History 90, 91, and 92; Psychology 11; and Phonetics 42.

Courses 20, 21[and 22, are not open to students who elect their major in English. For students who minor in English and who intend to teach the subject, the department recommends a substantial program of study selected from the following: 11, 12, 15, 16, 17, 18, 19, 71, 72, 73, 74, 75, 82 or 24, 97.

Students making English a minor and desiring the recommendation of the department to take secondary training in English must show satisfactory credit in courses 11 and 12 or their equivalent.

The "Teaching Major" in English

The requirements for the "teaching major" in English and for the regular major are the same except that the foreign

language requirements may be reduced or waived by the department to meet the special needs of some prospective teachers. Such reductions or waivers would necessitate, of course, the substitution of the Bachelor of Science degree for the degree of Bachelor of Arts.

English is one of the subjects comprising the composite major in **Language Arts** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Requirements for the Degree of Master of Arts

Candidates for the degree of Master of Arts in English must have met the requirements for the degree of Bachelor of Arts or their equivalent. They must offer upper division or graduate credit in Old English, Chaucer, Shakespeare, and History of the English Language; they must have, exclusive of thesis credits, at least twenty hours of graduate credit in English; they must write a satisfactory thesis, and pass a comprehensive oral examination in the field of English language and literature.

Placement Tests for Freshman English

In Freshman English, consideration is given to the individual needs of students. To determine these needs all freshmen are required to take a placement test at the time of registration. Assignments to classes are made after this test.

Lower Division Courses

- a. **English Grammar and Composition.** Autumn, Winter. M. W. F., 3:00. No credit. (Not given this year.)

An elementary course required of freshmen who make an unsatisfactory grade in the English placement test.

1. **Composition and Literature.** Autumn. M. W. F., Classes available at 8:00, 9:00, 10:00, and 2:00. Three credit hours.

Review of grammar, study of the principles of composition, theme writing, and reading in literature.

2. **Composition and Literature.** Winter. Sections and time the same as in course 1. Three credit hours.

Continuation of Course 1.

- 3. Composition and Literature.** Spring. Sections and time the same as in courses 1 and 2. Three credit hours.
Continuation of course 2.
- 4. Business English.** Autumn, Winter. M. W. F. Three credit hours. (See Office Practice 31.)
The substance and style of business English; correctness of diction; business forms and usages. Prerequisites: English 1, 2, 3.
- 11. Advanced English Grammar.** Autumn. M. T. W. Th., 1:00. Four credit hours. Young.
Prerequisites: English 1, 2, 3.
- 12. Advanced Rhetoric and Composition.** Autumn. M. W. F., 11:00. Three credit hours. Christensen.
Long themes, lectures, conferences, and required reading. Prerequisites: English 1, 2, 3.
- 14. Classic Myths.** Autumn. T. Th., 9:00. Two credit hours. Carroll.
A study of Greek, Roman, and Teutonic myths with special reference to their literary use.
- 15. Early American Writers.** Autumn. T. Th., 9:00. Two credit hours. Britsch.
A survey of American literature from Captain John Smith to about 1865.
- 16. Later American Writers.** Winter. T. Th., 9:00. Two credit hours. Britsch.
A survey of American literature from about 1865 to the present century.
- 17. Contemporary American Poets.** Spring. T. Th., 2:00. Two credit hours.
A study of the principal American poets.
- 18. Contemporary American Short Story Writers.** Winter. T. Th., 2:00. Two credit hours. (Not given this year.)
A study of the principal American short story writers.
- 19. Contemporary American Novelists.** Spring. T. Th., 2:00. Two credit hours. (Not given this year.)
A study of the principal American novelists.
- 20. Masterpieces of English Literature.** Autumn. T. Th., 9:00. Two credit hours. Tanner.

A study of the principal English masterpieces.

21. **Masterpieces of English Literature.** Winter. T. Th., 9:00. Two credit hours. Tanner.

A continuation of course 20.

22. **Masterpieces of English Literature.** Spring. T. Th., 9:00. Tanner. Two credit hours.

A continuation of course 21.

24. **Shakespeare.** Autumn. M. T. W. Th., 2:00. Four credit hours. Young.

A comprehensive study of Shakespeare's poems and plays.

25. **Emerson.** Spring. M. W. F., 10:00. Three credit hours.

A study of the author's poetry and prose.

29. **An Introduction to Literature.** Autumn. M. T. W. Th., 9:00. Four credit hours. Christensen.

An introductory course in the study and appreciation of literature—poetry and prose.

30. **Wordsworth: The Shorter Poems.** Winter. M. W. F., 10:00. Three credit hours. Rowe.

See General and Comparative Literature, for courses 26, 27, 28, 61, 62, 63, 65, 66, 67, 68, 69.

Upper Division Courses

52. **Argument and Debate.** Autumn. M. W. F., 9:00. Three credit hours. Rowe. (See Speech 52.) (Not given this year.)

A study of the principles of argument followed by a series of debates on current questions. Prerequisites: English 1, 2, 3.

53. **Romantic Prose.** Spring. T. Th., 9:00. Two credit hours. Rowe.

A study of the principal prose writings of the Romantic Movement.

54. **Contemporary British Literature.** Autumn. M. W. F., 9:00. Three credit hours. Rowe. (Not given this year.)

55. **The American Tradition in Literature.** Winter. M. W.

F., 10:00. Three credit hours. Tanner. (Not given this year.)

The social, economic, and political life of America as reflected in American literature.

58. **Modern Short Biography.** Winter. M. W. F., 1:00. Three credit hours. Young.

60. **English Drama to 1642.** Spring. M. T. W. Th., 1:00. Four credit hours. Young.

The beginning and development of English drama, not including Shakespeare, to the closing of the theatre.

64. **Restoration Drama.** Spring. M. W. F., 9:00. Three credit hours. Young. (Not given this year.)

71. **Medieval Literature.** Autumn. M. T. W. Th., 3:00. Four credit hours. Christensen.

72. **English Literature from 1500-1660.** Winter. M. T. W. Th., 2:00. Four credit hours. Young.

73. **English Literature from 1660-1780.** Spring. M. T. W. Th., 2:00. Four credit hours. Young.

74. **English Literature from 1780-1832.** Winter. M. T. W. Th., 9:00. Four credit hours. Rowe.

75. **English Literature from 1832-1900.** Spring. M. T. W. Th., 9:00. Four credit hours. Carroll.

80. **Alexander Pope.** Autumn. M. W. F., 9:00. Three credit hours. (Not given this year.)

81. **Chaucer.** Winter. M. T. W. Th., 8:00. Four credit hours. Christensen.

82. **Shakespeare.** Spring. M. T. W. Th., 8:00. Four credit hours. Christensen.

An intensive and critical study of the principal plays.

83. **Milton.** Winter. M. W. F., 9:00. Three credit hours. Christensen.

A study of the author's poetry and prose.

84. **Wordsworth: The Longer Poems.** Spring. M. W. F., 9:00. Three credit hours. Rowe.

The author's theory of poetry and his principal poems will be studied.

85. **Tennyson.** Autumn. M. W. F., 10:00. Three credit hours. (Not given this year).

A study of the author's principal major and minor poems.

86. **Browning.** Spring. M. W. F., 9:00. Three credit hours. Britsch.

87. **Matthew Arnold.** Spring. M. W. F., 11:00. Three credit hours. Christensen.

Study of Arnold's poetry and prose.

88. **Samuel Johnson.** Winter. M. W. F., 10:00. Three credit hours. Young. (Not given this year.)

A study of "Lives of the Poets," "Rasselas," and Boswell's "Life of Johnson."

89. **Byron.** Winter. M. W. F., 11:00. Three credit hours. Rowe.

A study of the author's principal works.

90. **Romantic Poetry.** Autumn. M. W. F., 11:00. Three credit hours. Rowe.

A study of romanticism as manifested in the poetry of the eighteenth and nineteenth centuries.

91. **Victorian Prose.** Autumn. M. W. F., 2:00. Three credit hours.

92. **The English Novel.** Autumn. M. T. W. Th., 9:00. Four credit hours. Rowe. (Not given this year.)

The history of English prose fiction to the beginning of the Victorian Period.

93. **The Modern English Novel.** Autumn. M. T. W. Th., 9:00. Four credit hours. Rowe. (Not given this year.)

A consideration of the technique of the novel and various phases of life reflected in this form of literature.

94. **The Contemporary Essay.** Winter. M. W. F., 11:00. Three credit hours. Christensen.

A course in present day thought and feeling.

95. **Old English.** Winter. M. W. F., 11:00. Three credit hours. Christensen.

Old English grammar and reading exercises.

96. **Beowulf.** Spring. M. W. F. Time to be arranged. Three

credit hours. Christensen. (Not given this year.)

The entire poem is read in the original. Prerequisite Course 95.

97. **The History of the English Language.** Spring. M. T. W. Th., 9:00. Four credit hours. Christensen.

A historical and philological study of the language from the Old English period to the present time.

98. **The Criticism and Appreciation of Literature.** Spring. M. W. F., 10:00. Three credit hours. Christensen. (Not given this year.)

A study of critical theories and standard of value.

GENERAL AND COMPARATIVE LITERATURE

Lower Division Courses

- 26, 27, 28. **Types of World Drama.** Autumn, Winter, Spring. T. Th., 8:00. Two credit hours each quarter. Rowe. (Not given this year.)

The great plays of the world are studied according to type.

Upper Division Courses

62. **Modern European Drama.** (British.) Winter. M. W. F., 2:00. Three credit hours.

63. **Modern Drama.** (American.) Spring. M. W. F., 2:00. Three credit hours.

- 65, 66, 67. **Types of World Literature.** Autumn, Winter, Spring. T. Th., 2:00. Two credit hours each quarter. Carroll.

69. **Poetry.** Spring. M. W. F., 11:00. Three credit hours. Rowe.

A somewhat technical study of versification, forms, and theories of poetry.

Graduate Courses

153. **Romantic Prose.** Spring. T. Th., 9:00. Two credit hours. Rowe.

160. **English Drama to 1642.** Spring, 1:00. Young.
164. **Restoration Drama.** Spring. M. W. F., 9:00. Three credit hours. Young. (Not given this year.)
- 165, 166, 167. **Types of World Literature.** Autumn, Winter, Spring. T. Th., 2:00. Two credit hours each quarter. Carroll.
171. **Medieval Literature.** Autumn. 8:00. Four credit hours. Christensen.
172. **English Literature from 1500 to 1660.** Winter. 2:00. Four credit hours. Young.
173. **English Literature from 1660 to 1780.** Spring. 2:00. Four credit hours. Young.
174. **English Literature from 1780 to 1832.** Winter. 9:00. Four credit hours. Rowe.
175. **English Literature from 1832 to 1900.** Spring. 9:00. Four credit hours. Carroll.
180. **Alexander Pope.** M. W. F. Three credit hours. (Not given this year.)
181. **Chaucer.** Winter. 8:00. Four credit hours. Christensen.
182. **Shakespeare.** Spring. 8:00. Four credit hours. Christensen.
183. **Milton.** Winter. 9:00. Three credit hours. Christensen.
184. **Wordsworth.** Spring. 9:00. Three credit hours. Rowe.
185. **Tennyson.** Winter. M. W. F., 2:00. Three credit hours. (Not given this year.)
186. **Browning.** Spring. 9:00. Three credit hours. Britsch.
187. **Matthew Arnold.** Spring. 11:00. Three credit hours. Christensen.
188. **Samuel Johnson.** Winter. 10:00. Three credit hours. Young. (Not given this year.)
189. **Byron.** Winter. M. W. F., 11:00. Three credit hours. Rowe.
190. **Romantic Poetry.** Autumn. M. W. F., 11:00. Three credit hours. Rowe.

191. **Victorian Prose.** Autumn. M. W. F., 2:00. Three credit hours.
192. **The English Novel.** Autumn. 9:00. Four credit hours. Rowe. (Not given this year.)
195. **Old English.** Autumn, Winter. 11:00. Three credit hours. Christensen.
196. **Beowulf.** Spring. M. W. F. Time to be arranged. Three credit hours. Christensen. (Not given this year.)
197. **The History of the English Language.** Spring. 9:00. Four credit hours. Christensen.
198. **The Criticism and Appreciation of Literature.** Spring. 10:00. Three credit hours. Christensen. (Not given this year.)
200. **Thesis for Master's Degree.** Time and credit to be arranged.

Geology and Geography

*Professors Hansen, Martin; Associate Professor Coffman;
Mr. Bullock.*

GEOLOGY

Geology 11, 12, 50, 51, 52, 53, and 57; Chemistry 4, 5, 6; Physics 41, 42, 43; Mathematics 11, 12; Drawing 6; and Engineering 1, 3, are recommended for students majoring in Geology.

A teaching major in Geology and Geography shall include Geology 11, 12, and twenty-five hours in additional courses approved by the Chairman of the Department.

Geology and Geography are among the subjects comprising the composite majors in **Mathematics and Physical Science** and in **Biological Science** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **Introduction to Earth Science.** Autumn, Winter, or Spring. Daily, 9:00. Four credit hours. Four lectures and one demonstration or quiz section. One or two Saturday field trips are required. Staff.

This course is especially designed for the non-science student and not for majors in the department of Geology.

11. **Physical Geology.** Autumn. Lectures, M. T. W. F., 2:00. Laboratory, Th., 2:00 to 4:00, and two Saturday field trips. Five credit hours. Hansen.

The common rock-forming minerals, the common rocks, and representative topographic maps will be studied in the laboratory. A course especially suited for majors in Geology, Physics, and Chemistry.

12. **Historical Geology.** Winter. Lectures, M. T. W. F., 2:00. Laboratory, Th., 2:00 to 4:00 and two Saturday field trips. Five credit hours. Hansen.

A study of the history of the earth and the evolution of life forms. Representative fossil forms will be studied in the laboratory.

- 13. Geology of the United States.** Spring. Daily, 2:00. Five credit hours. Hansen.

A study of the stratigraphy, structure, and areal geology of the United States from the geologic maps of representative areas. Prerequisites: Geology 11 and 12.

- 14. Engineering Geology.** Autumn. Daily. Five credit hours. Hansen. (Not given this year.)

A course outlining the fundamental principles in geology which relate to engineering practice, including the character of rocks, their use in building, their structure, and their relation to tunneling, etc.; and the geological conditions which affect and control underground waters.

- 15. Introductory Economic Geology.** Winter. M. W. F., 11:00. Three credit hours. Bullock.

A study of the manner of occurrence, origin and uses of the metallic ores and non-metallic mineral products.

- 16. Geomorphology.** Spring, Daily, 9:00. Four credit hours. Four lectures and one quiz section. Staff. (Not given this year.)

A study of earth forms with special emphasis on the agents responsible for them.

Upper Division Courses

- 50. Gemmology.** Autumn or Spring. T. Th., 3:00. Two credit hours. Hansen.

A cultural course especially arranged for teachers.

- 51. Mineralogy.** Autumn. M. W. F., 11:00. Laboratory, T. Th., 1:00 to 3:00. Five credit hours. Bullock.

A general course in Mineralogy. The laboratory periods will be devoted to crystallography and the identification of the non-silicate minerals by blowpipe analysis. Prerequisites: Chemistry 6, and Geology 11.

- 52. Structural Geology.** Winter. Daily, 11:00. Five credit hours. Hansen or Bullock.

A study of rock structures caused by earth movements. Emphasis will be placed upon the solving of structural problems in sedimentary rocks and the primary structures of igneous and metamorphic rocks will be treated with less detail. Prerequisite: Geology 51.

- 53. Geologic Surveying.** Autumn. Daily, 2:00 to 4:00. Five credit hours. Coffman and Hansen. (Not given this year.)

A course intended to acquaint students with the use of the compass barometer, levels, alidades, and transit in geologic surveying. Prerequisites: Geology 52, and Mathematics 12.

54. **Mineral Optics.** Autumn. T. Th., 2:00 to 5:00. Two credit hours. Bullock.

A study of the principles of mineral identification by means of the petrographic microscope. Prerequisite: Geology 51.

55. **Petrography.** Winter. T. Th., 2:00 to 5:00. Two credit hours. Bullock.

A study of the common rocks with the aid of the petrographic microscope. Prerequisite: Geology 54.

56. **Petrology.** Spring. T. Th., 2:00 to 5:00. and Saturday field trips. Two credit hours. Bullock.

A megascopic study of the common rocks with emphasis upon classification and field identification. Prerequisite: Geology 51.

57. **Soil Geology.** Spring. T. Th., 8:00. Laboratory, W., 3:00 to 5:00. Three credit hours. Martin. Prerequisite: Geology 11. (See Agronomy 57.)

58. **Field Geology.** Spring. Daily, 2:00. Five credit hours. Hansen.

A course in the practical application of geologic knowledge to the interpretation of field problems. Each student will be required to make a topographic and geologic map of a small area in the Wasatch or elsewhere near the campus. Prerequisites: Geology 52, and Mathematics 12.

70. **Invertebrate Paleontology.** Winter. Daily, 2:00, and laboratory work. Five credit hours. Hansen. Prerequisite: Geology 12.

71. **Vertebrate Paleontology.** Winter. Daily, 2:00, and laboratory work. Five credit hours. Hansen. Prerequisite: Geology 12. (Not given this year.)

72. **Physical Anthropology.** Spring. M. W. F., 2:00. Three credit hours. Hansen. Prerequisite: Geology 12. (Not given this year.)

73. **Sedimentation and Stratigraphy.** Spring. Daily, 2:00 and laboratory work. Five credit hours. Hansen. Prerequisite: Geology 52. (Not given this year.)

- 74. Stratigraphy and Fossils of the Wasatch.** Spring. Time to be arranged. Eight hours field work or laboratory work. Three credit hours. Hansen. Prerequisite: Geology 70. (Not given this year.)
- 90. Ore Deposits.** Spring. Daily, 11:00. Five credit hours. Bullock. (Not given this year.)
A study of the geologic occurrence and relationships of the ore minerals. Prerequisites: Geology 51 and 52.
- 91. The Non-Metallic Minerals.** Spring. Daily, 11:00. Five credit hours. Bullock. Prerequisite: Geology 51.
- 92. Geology of Ground Water.** Winter. Daily. Five credit hours. Coffman. Prerequisite: Geology 51. (Not given this year.)
- 96. Readings in Geology.** Any quarter. One to six credit hours, no more than one hour any quarter. Hansen.

Graduate Courses

- 101, 102, 103. Research.** Hours and credit to be arranged. Hansen and Coffman. Special problems in the field of Geology will be assigned to students prepared to do original work.
- 110. Geology of Utah.** Autumn. T. Th., 2:00, and three long field trips, the expense of which is borne by the students. Three credit hours. Hansen. Prerequisite: Geology 52. (Not given this year.)
- 151. Advanced Work in Mineralogy.** Time and credit to be arranged. Prerequisite: Geology 51.
- 152. Problems in Structural Geology.** Time and credit to be arranged. Prerequisite: Geology 52.
- 153. Engineering Problems in Geology.** Time and credit to be arranged. Hansen and Coffman. Prerequisite: Geology 53.
- 170. Special Problems in Invertebrate Paleontology.** Six hours of laboratory work by arrangement. Three credit hours. Hansen.
- 171. Special Problems in Vertebrate Paleontology.** Six hours laboratory work by arrangement. Three credit hours. Hansen.

190. **Special Problems in Metals.** Time and credit to be arranged. Prerequisite: Geology 90.
191. **Special Problems in Non-Metals.** Time and credit to be arranged. Prerequisite: Geology 91.
200. **Thesis Work.** Not more than six credit hours.

GEOGRAPHY

Lower Division Courses

20. **World Geography.** Autumn. Daily 8:00. Five credit hours. Coffman.

A study of earth relations and place geography. **Note:** Geography 20 and 21 in connection with Geology 1 are so arranged to fill the requirement for orientation courses in physical science.

21. **Human Geography of Utah.** Winter. M. W. F., 10:00. Three credit hours. Hansen.

The response man has made to this geographic environment.

22. **Introductory Geography.** Winter. Daily, 8:00. Five credit hours. Coffman.

The elements of the natural environment and the relation of geography to the physical and social sciences.

23. **Regional Economic Geography.** Spring. Daily, 8:00. Five credit hours. Coffman. (See Marketing 23.)

The geography of world commodities; a survey of the economic activities of the world's political entities from a regional aspect.

24. **Cartography and Map Interpretation.** Autumn, M. W. F., 9:00. Three credit hours. Coffman.

A study of the kinds and uses of maps, their construction and interpretation. Military use and interpretation will be emphasized.

Upper Division Courses

60. **Climatology.** Winter. M. W. F., 9:00. Three credit hours. Coffman.

Elements, controls, and types of climate and their distri-

bution. Also recent thought on climatic regions. Prerequisites: Geography 22 or fifteen hours in natural sciences.

61. **Conservation and Land Utilization.** Spring. M. W. F., 9:00. Three credit hours. Coffman.

Importance, location, and conservation of our natural resources. Prerequisites: Geography 23 or fifteen hours in natural or social science including Agronomy, Botany, or Economics.

62. **Geography of North America.** Autumn. M. W. F., 10:00. Three credit hours. Coffman. Prerequisite: Geography 22, or consent of instructor.

The geographic regions of Canada, United States, and Alaska.

63. **Geography of Latin America.** Winter. M. W. F., 10:00. Three credit hours. Coffman. Prerequisite: Geography 22, or consent of instructor.

The geographic regions of Mexico, West Indies, Central and South America.

64. **Geography of Europe.** Spring. M. W. F., 10:00. Three credit hours. Coffman. Prerequisite: Geography 22, or consent of instructor.

65. **Geography of Asia.** Spring. M. W. F., 2:00. Three credit hours. Coffman. Prerequisite: Geography 22.

68. **Political Geography.** Autumn. M. W. F., 10:00. Three credit hours. Coffman.

A study of the geopolitics of the great powers at war.

96. **Readings in Geography.** Any quarter. One to six credit hours, no more than two hours of which may be taken in any one quarter. Coffman.

Graduate Courses

- 105, 106, 107. **Research.** Hours and credit to be arranged. Hansen and Coffman.

Under this course special problems may be assigned students who are prepared to do original work in the field of Geography.

111. **Physiography of Utah.**—Time and credit to be arranged. Hansen.

Deals with the present surface forms of Utah and how they came to be developed.

121. **Special Problems in Human Geography of Utah.** Time and credit to be arranged. Hansen.
122. **Special Problems in Environmental Geography.** Time and credit to be arranged. Coffman.
123. **Special Problems in Economic Geography.** Time and credit to be arranged. Coffman.
160. **Special Problems in Climatology.** Time and credit to be arranged. Coffman.
161. **Special Problems in Conservation and Land Utilization.** Time and credit to be arranged. Coffman.
162. **Special Problems in Geography of North America.** Time and credit to be arranged. Coffman.
163. **Special Problems in Geography of Latin America.** Time and credit to be arranged. Coffman.
164. **Special Problems in Geography of Europe.** Time and credit to be arranged. Coffman.
165. **Special Problems in Geography of Asia.** Time and credit to be arranged. Coffman.
186. **Readings in Geography.** Any quarter. One to six credit hours, no more than two hours of which may be taken in any one quarter. Coffman.
200. **Thesis Work.** Not more than six credit hours.

Health, Physical Education, and Recreation

Professors Hart, Cullimore, Merrill, Holbrook, Martin, Poulson, Tanner; Associate Professors Merrill, Hayward, Snow; Assistant Professors Dixon, Millet, Ensign, Mr. Crowton, Mrs. Hall.

The department of Health, Physical Education, and Recreation offers courses in these three areas to meet freshman re-

quirements, graduation requirements, and elective desires of students.

Each freshman student is required to take Health 1 and to register for one lower division physical education course during each quarter of his freshman year. A variety of activities is available for choice. Three quarters of activity will provide the opportunity for organic development, neuromuscular skill, social contact in game and team situations, and other carry-over values.

Extra curricular activities are promoted for student participation: games, sports, hikes, dancing, and intramural athletics. The department urges all students to participate regularly in some form of physical activity.

The Brigham Young University is a member of the Mountain States Athletic Conference. A full schedule of interscholastic athletic competition, as sponsored by the Conference, is participated in by the school.

Students using the towel service are required to make a 25 cent deposit by purchasing a towel check. The towel check is exchangeable for towel service during regular school hours. Towel checks are redeemable at any time.

A thorough physical and medical examination will be given each freshman student upon entering the institution.

Students registered for physical education activity courses are required to provide themselves with the official uniform which may be purchased at the University book store. They are also required to provide themselves with an approved combination padlock for use on basket locker.

THE TEACHING MAJOR IN PHYSICAL EDUCATION

A teaching major in physical education is offered in this department.

Students proceeding upon a major in physical education should register according to the following four-year program. This program is so constructed that all requirements for graduation, including group requirements; state certification for teaching in Utah; and the teaching major; are thereby met.

Requirements for an accompanying teaching minor are quite largely met in filling group requirements. Choice of elec-

tives under departmental direction will complete the minor.

Students majoring in physical education or those who plan to major in physical education should consult with and register through advisors in this department.

CURRICULUM FOR PHYSICAL EDUCATION MAJORS

FRESHMAN YEAR

	Credit Hours
English 1, 2, 3	9
Religious Education	6
Physical Education 4, 5, 6 (or 7, 8, 9)	6
Health 1	1
Bacteriology 21	3
Sociology	5
Economics or History	5
Physics 1 (Autumn)	3
Chemistry	
Electives	

SOPHOMORE YEAR

English	7
Religious Education	6
Physical Education 7, 8 9 (or 4, 5, 6.)	6
Zoology 45	4
Foods and Nutrition 5	3
Geology	3
Physical Education 31, 32, 33 (Women)	3
Electives	

JUNIOR YEAR

English	2
General Education 63	3
Sociology 71	2
Physical Education 51, 52, 53 (Men)	6
Physical Education 61, 62, 63 (Women)	3
Physical Education 42 (Women)	1
Physical Education 91	3
Physical Education 90	3
Health 95	3
Recreation 71	3
General Education 53	3
Secondary Education 81	4
General Education 57	2
Health 58	3
Electives	

SENIOR YEAR

Physical Education 88	3
Physical Education 93	3
Physical Education 94	5
Physical Education 96	3
Philosophy of Education 93	3
Secondary Education 84	8
Secondary Education 94	4
Secondary Education 96	3
Electives	

HEALTH**Lower Division Courses**

- 1. Personal Hygiene.** Autumn, Winter, or Spring. T. Th., 1:00. One credit hour. Cullimore, Merrill.

This course is required of all freshmen students. The course is designed to present in a popular manner problems concerning personal hygiene and proper health habits.

- 5. Elementary Nutrition.** Winter, 10:00. Autumn and Spring, M. W. F., 8:00. Three credit hours.

The study of the fundamentals of nutrition and the use of the diet in maintaining physical fitness.

Open to men and women. Required of majors in vocational education.

- 10. Family Health.** Winter. M. W. F., 8:00. Three credit hours. Hollingshead.

A consideration of factors underlying health; methods concerned with the control and prevention of communicable and infectious diseases; home care of the sick.

- 21. Bacteriology.** Autumn, Winter, or Spring. M. W. F., 3 or 5 credit hours. (See Bacteriology 21.) Sec. 1, 9:00, Autumn, Winter. Martin; Sec. 2, 10:00, Autumn, Winter, Spring. Snow.

- 22. Bacteriology Laboratory.** Autumn, Winter, or Spring. Sec. 1, M. W. Sec. 2, T. Th., 1:00-4:00 Two credit hours. Martin. (See Bacteriology 22.)

Laboratory course in general bacteriology, designed to accompany Health 21.

45. **Vertebrate Anatomy and Physiology.** Winter and Spring. M. W. F., 8:00. Laboratory, T. Th., 1:00-4:00. Four credit hours. Hayward. (See Zoology 45.)

This course is designed for the majors and minors in physical education. The instruction will provide for a preparation to teach such subjects as physiology, hygiene, and general zoology in the high school curriculum. A general survey of the vertebrate animals will be undertaken. A thorough appreciation of comparative anatomy of representative vertebrates and their physiology will constitute the main part of the laboratory work.

Upper Division Courses

57. **Materials and Methods in Safety Education.** Autumn, Winter, Spring. T. Th., 2:00. Two credit hours. Hart.

The course will be broad in scope, yet will give emphasis to such matters as protecting the school child; safety education in the schools; safety in the home, on the farm and in industry; traffic safety; bicycle safety; and sources and selection of materials.

58. **Health Education for Teachers.** Autumn, Winter, Spring. M. W., 1:00. Three credit hours. Tanner.

Designed especially for those who are preparing to teach in the public schools.

65. **Human Physiology.** Autumn. M. W. F., 10:00. Three credit hours. Hayward. (See Zoology 65.)

This course is designed to give the student a working knowledge of the life processes as they function in man. Prerequisite: Zoology 11.

68. **Public Health and Sanitation.** Three credit hours. M. W. F., Martin. (See Bacteriology 68.)

The principles of public health, emphasizing facts vital to the public welfare such as the safety of water and milk supplies, sewage disposal, prevention of disease, the venereal disease problem and vital statistics. Information of value to teachers, community leaders, and citizens during the emergency. Lectures and demonstrations.

69. **Mental Hygiene.** Spring. M. W. F., 10:00. Three credit hours. Poulson. (See Psychology 69.)

A consideration of certain practical applications of mental health of immediate value to students in meeting many

of their personal problems. Also applications in educational remedial social work will be indicated. Prerequisite: Psychology 11, or equivalent.

- 95. First Aid.** Autumn. M. W. F., 1:00. Three credit hours. Hart.

Principles of first aid treatment of injuries, massage physio-therapy, bandaging, and the essentials of conditioning. Those successfully completing the course will be given the official American Red Cross Standard and Advanced First Aid Course Certificates.

PHYSICAL EDUCATION

Lower Division Courses

- 1, 2, 3. Elementary Physical Education.** Autumn, Winter, Spring. One credit hour each quarter. **Women's Section:** M. W. F., 10:00; **Men's Section:** Sec. 1, M. W. F., 10:00; Sec. 2, M. W. F., 11:00; Sec. 3, M. W. F., 1:00; Sec. 4, M. W. F., 2:00.

These courses will include games, and a variety of athletic and gymnastic activities.

- 4. Skills and Techniques.** (Women.) Autumn. Daily. 3:00. Two credit hours. Holbrook.

Soccer, speedball, and folk dancing. (Not given this year.)

- 4. Skills and Techniques.** (Men.) Autumn. Daily, 3:00. Two credit hours. Dixon and Staff.

Soccer, speedball, touch football and folk dancing. (Not given this year.)

- 5. Skills and Techniques.** (Women.) Winter. Daily, 3:00. Two credit hours. Holbrook and Staff.

Marching, social dancing, stunts, pyramids, tumbling, and volley ball. (Not given this year.)

- 5. Skills and Techniques.** (Men.) Winter. Daily, 3:00. Two credit hours. Dixon and Staff.

Marching, social dancing, tumbling, apparatus, wrestling, volley ball. (Not given this year.)

- 6. Skills and Techniques.** (Women.) Spring. Daily, 3:00. Two credit hours. Holbrook and Staff.

Group games and relays, outdoor games, track and

field, and archery. (Not given this year.)

6. **Skills and Techniques.** (Men.) Spring. Daily, 3:00. Two credit hours. Dixon and Staff.

Group games and relays, outdoor games, softball, archery. (Not given this year.)

7. **Skills and Techniques.** (Women.) Autumn. Daily, 3:00. Two credit hours. Holbrook.

Field ball, hockey, badminton.

7. **Skills and Techniques.** (Men.) Autumn. Daily, 3:00. Two credit hours. Dixon and Staff.

Football, six-man football, badminton, apparatus, tumbling.

8. **Skills and Techniques.** (Women.) Winter. Daily, 3:00. Two credit hours. Holbrook and Staff.

Basketball, handball, rope jumping, tap, and dynamics of modern dance.

8. **Skills and Techniques.** (Men.) Winter. Daily, 3:00. Two credit hours. Dixon and Staff.

Boxing, basketball, handball, rope jumping, dynamics of modern dance, tap dance.

9. **Skills and Techniques.** (Men.) Spring. Daily, 3:00. Two credit hours. Holbrook and Staff.

Recreational sports, softball, tennis, and golf.

9. **Skills and Techniques.** (Men.) Spring. Daily, 3:00. Two credit hours. Dixon and Staff.

Track and field, tennis, golf. Recreational sports.

10. **Basketball for Beginners.** (Women.) Winter, M. W. F., 4:00. One credit hour. Holbrook.

11. **Volley Ball.** Men's Sec. Winter. T. Th., 1:00. Women's Section. Autumn. M. W. F., 11:00; Winter, M. W. F., 1:00. One credit hour.

12. **Badminton.** Men's Section. Winter. T. Th., 2:00. Dixon. Women's Section. Autumn, Winter, Spring. T. Th., 8:00. Hall. One credit hour.

13. **Soccer and Speedball.** (Women.) Autumn. M. W. F., 1:00. One credit hour. Staff.

14. **Archery.** (Men and Women.) Autumn. Spring. Daily, 1:00. One credit hour. Holbrook.

This course aims to develop individual techniques, providing experience in various types of tournaments and related archery activities.

15. **Tumbling.** (Men.) Autumn, Winter, M. W. F., 9:00. One credit hour. Millet. (Not given this year.)

15. **Tumbling, Pyramid Building and Stunts.** (Women) Autumn, Spring, T. Th., 2:00. One credit hour. Holbrook.

Simple tumbling events in keeping with beginners' ability will be taught as foundation work. Other items will be given to develop skill and coordination for the fun and satisfaction of the performers.

16. **Hockey.** (Women.) Autumn. M. W. F., 2:00. One credit hour. Holbrook.

17. **Boxing.** Autumn, Winter. M. W. F., 1:00. One credit hour. Staff. (Not given this year.)

This course will consist of the theory and practice of boxing.

18. **Wrestling.** Autumn, Winter. M. W. F., 9:00. One credit hour. Staff. (Not given this year.)

This course will consist of the theory and practice of wrestling.

19. **Tennis.** (Men and Women.) Spring. M. W. F. Sec. 1, 9:00. Sec. 2, 10:00. One credit hour. Dixon.

This course will consist of the theory and practice of tennis. Limited to 24 students per class. Not open to freshmen. By permission of instructor only.

20. **Golf.** (Men and Women.) Spring. M. W. F., 3:00. One credit hour. Provo Municipal Golf Course. Staff. (Not given this year.)

This course will consist of the theory and practice of golf. A special fee is charged for this course. Students will be required to furnish their own equipment.

21. **Softball and Spring Athletics.** (Women). Spring. M. W. F. Sec. 1, 1:00; Sec. 2, 2:00. One credit hour. Holbrook.

24. **Fencing.** Winter. Three periods each week. M. W. F., 3:00. One credit hour. Staff. (Not given this year.)

Open to both men and women. Students will furnish their own equipment.

26. **Elementary Clog and Tap Dancing.** (Men and Women.) Autumn, Spring. T. Th., 1:00. One credit hour. Hall.

Simple routines and rhythms will be taught and worked out to old-time and modern music. Emphasis will be placed upon the recreative rather than the professional aspects of the activity.

27. **Advanced Tap.** (Men and women.) Winter. T. Th., 1:00. One credit hour. Hall.

For those who have already attained a degree of skill in tap technique. Prerequisite: Physical Education 26, or fundamental tap steps, time steps, and knowledge of several routines.

30. **Intermediate Basketball.** (Women). Winter. M. W. F., 2:00. One credit hour. Holbrook.

31. **Creative Dance.** Autumn. M. W. F., 9:00. One credit hour. Ensign.

32. **Creative Dance.** Winter. M. W. F., 9:00. One credit hour. Ensign.

Development of techniques into dance studies and single forms in composition.

33. **Creative Dance.** Spring. M. W. F., 9:00. One credit hour. Ensign.

Intermediate and advanced techniques.

39. **Advanced Tennis.** Spring. M. W. F., 8:00. One credit hour. Dixon.

Advanced course in the theory and practice of tennis. Prerequisite: Physical Education 19, or admission by permission of instructor.

42. **Folk and Country Dancing.** (Men and women). One credit hour. Staff. Winter. Sec. 1, M. W. F., 11:00. Sec. 2, T. Th., 2:00.

43. **American Folk Dancing.** (Men and Women). Spring. M. W. F., 11:00. Square and round dances of the United States and dances of the Americas. One credit hour. Staff.

Upper Division Courses

51. **Athletic Coaching and Directing — Football.** Autumn.

Three periods each week. 10:00. Three credit hours. Millet.

This course is designed to prepare students for the coaching of football. It will deal with the fundamentals of the game, methods of working out plays, systems of offense and defense, the conditioning of teams, etc.

- 52. Athletic Coaching and Dancing — Basketball.** Winter. Three periods each week. 10:00. Three credit hours. Millet.

This course is designed to prepare for the coaching of basketball. Students will be thoroughly instructed in fundamentals, offensive and defensive systems, schedule making, etc.

- 53. Athletic Coaching and Directing — Track and Field.** Spring. Three periods a week. 10:00. Three credit hours. Millet.

This course will deal with the technique of track and field athletics and with the management of meets.

- 59. Physical Education for Elementary Teachers.** Autumn. W. F., 4:00 to 5:15. Two credit hours. Hall.

This course, required of all elementary majors, will include fundamentals of physical education in small and large group play, and team activities.

- 60. Physical Education for Elementary Teachers.** Spring. W. F., 4:00 to 5:15. Two credit hours. Hall.

This course, required of all elementary teachers, is a continuation of Physical Education 59 and includes rhythmic activities, stunts, and classroom games.

- 61. Creative Dance.** Autumn. M. W. F., 8:00. One credit hour. Ensign. Advanced forms of composition.

- 62. Creative Dance.** Winter. M. W. F., 8:00. One credit hour. Ensign.

- 63. Creative Dance.** Spring. M. W. F., 8:00. One credit hour. Ensign.

A survey course in dance from kindergarten to college. Methods of presenting a follow-through program in teaching, program of planning and organization.

- 88. Physiology of Activity.** Winter. M. W. F., 1:00. Three credit hours. Kimball. (Not given this year.)

A study of the processes which occur in the body during exercise. Special attention will be given to the effects of exercise upon circulation, respiration, and metabolism. Prerequisite: Zoology 45.

90. **Principles of Physical Education.** Winter. M. W. F., 9:00. Three credit hours. Millet.

This course aims to acquaint the students with the philosophy and principles underlying physical education in order that they may gain a general comprehension and unified view of the entire subject.

91. **General Kinesiology.** Autumn. M. W. F., 8:00. Three credit hours. Dixon.

The anatomy of the human body with emphasis upon the study of bones, joints, and the skeletal muscles. Athletic exercises will be studied, with reference to their effect upon the body. Prerequisite: Zoology 45.

93. **Organization and Administration of Physical Education, Health, and Recreation.** Spring. M. W. F., 9:00. Three credit hours. Hart.

The executive and administrative problems arising out of organizing and conducting health, physical education, and recreation programs in schools and communities.

94. **Introduction to Achievement Tests in Physical Education.** Winter. Daily, 8:00. Five credit hours. Hart.

This course reviews the history of tests in physical education and also gives consideration to the essential procedure used in evaluating such tests and their results. Prerequisite: Educational Administration 74.

96. **Adaptation of Activities in Corrective Procedure.** Spring. M. W. F., 8:00. Three credit hours. Hart.

The variation of posture, the mechanics of balancing of the forces in the body, psychology of individual gymnastics, methods of stimulating interest in posture, and the selection and scope of corrective activities. Prerequisites: Zoology 45, Physical Education 91.

97. **Seminar in Physical Education.** Time and credit to be arranged.

Graduate Courses

188. **Physiology of Activity.** Winter. M. W. F., 1:00. Three

credit hours. Kimball. Prerequisite: Zoology 45. (Not given this year.)

190. **Principles of Physical Education.** Winter. M. W. F., 9:00. Three credit hours. Millet.
193. **Organization and Administration of Physical Education, Health, and Recreation.** Spring. M. W. F., 9:00. Three credit hours. Hart.
194. **Achievement Tests in Physical Education.** Winter. Daily, 8:00. Five credit hours. Hart.
196. **Adaptation of Activities in Corrective Procedure.** Spring. M. W. F., 8:00. Three credit hours. Open to both men and women. Hart. Prerequisites: Zoology 45, Physical Education 91.
197. **Seminar in Physical Education.** Time and credit to be arranged.
198. **Research in Physical Education.** Time and credit to be arranged.
200. **The Master's Thesis in Physical Education.** Credit by arrangement.

RECREATION

Lower Division Course

25. **Social Dancing.** Autumn. T. Th., 4:00. One credit hour. Staff.

Open to freshman and sophomore men and women. Permission must be obtained from instructor before registering. Credit in this course does not substitute for freshman physical education requirement.

Upper Division Courses

71. **The Theory of Play.** Autumn. M. W. F., 11:00. Three credit hours. Holbrook.

The theory of play and its organization, considering history, classification, the need for play in modern life, and play in education.

73. **Recreation Leadership.** Autumn, Winter, Spring. T. Th.,

10:00. Two credit hours. Holbrook and Hart.

This course is given to meet the needs of community, church, and school recreation leaders. Open to juniors and seniors.

97. Seminar in Recreation. Time and credit to be arranged.

Graduate Courses

171. Theory of Organized Play. Autumn. M. W. F., 11:00. Three credit hours. Holbrook.

197. Seminar in Recreation. Time and credit to be arranged.

History

• *Professor Jensen, Professor Emeritus Snow, Professors Sperry, R. B. Swensen.*

Requirements for Major in History

A History major requires the completion of 45 hours of work in this field. History 10, 11, 12, 20, 21, are required courses and should be completed by the end of the sophomore year. The additional work shall consist of upper division courses which will be chosen by the student with the consent of the major professor.

History 1 cannot be used in meeting the requirements for a major in history.

A student deciding to major in History must immediately consult the head of the department who will determine, in consultation with the student, upon the minor field of work.

History is one of the subjects comprising the composite major in Social Science designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **History of Civilization.** Five credit hours. Autumn. Daily, 2:00. Jensen.
An orientation course covering all phases of human achievement. Cultural and constructive forces are of chief consideration. The survey is universal in time and place. (History 1 may not be applied toward a history major.)
10. **Ancient Civilization.** Autumn. Daily, 8:00. Five credit hours. R. B. Swensen
A survey of early civilization dealing with the important oriental, Greek, and Roman states.
11. **Medieval and Early Modern Europe.** Winter. Daily, 8:00. Five credit hours. R. Swensen.
A study of the political, social, economic, and religious institutions from the disintegration of the Roman Empire to 1650.
12. **Modern and Contemporary Europe.** Spring. Daily, 8:00. Five credit hours. R. Swensen.
An examination of the political, economic, social, and cultural changes since 1650 which have resulted in the development of present day Europe.
20. **History of the United States to 1865.** Winter. Daily, 2:00. Five credit hours. Jensen.
Problems of discovery, exploration, and colonization; the American Revolution; the Constitution of the United States; the new national government; foreign affairs and the Monroe Doctrine; problems of the West, nullification and slavery.
21. **History of the United States since 1865.** Spring. Daily, 2:00. Five credit hours. Jensen.
Causes of the Civil War; secession; problems of the Civil War and reconstruction; the new economic era; a new imperialism; the United States and the First World War; post-war problems; relationship of United States to the present world conflict.

Upper Division Courses

50. **Early Oriental History.** Autumn. M. W. F., 9:00. Three credit hours. Sperry.

A study of ancient civilization including Egypt, Babylonia, Assyria, China, India, Arabia, Persia; also of the Hebrews, and other oriental races. The course is helpful to those especially interested in the Jewish scripture.

- 51. Greek History.** Winter. M. W. F., 9:00. Three credit hours. R. B. Swensen.

A study of the social, cultural, economic, and political developments of the Greek people from the early heroic age down to Alexander. Major emphasis on phases of Greek culture which have influenced Western civilization.

- 52. Roman History.** Spring. M. W. F., 9:00. Three credit hours. R. B. Swensen.

A survey extending from the rise of the Republic to the reign of Justinian. Special consideration will be given to the economic, social, cultural, and political forces, which brought about the growth and decline of the Empire.

- 62. Medieval History.** Autumn. M. W. F., 9:00. Three credit hours. R. B. Swensen. (Not given this year.)

Survey of the period from the disintegration of the Roman Empire to 814. Emphasis will be placed on the development of the Papacy, the Growth of Monasticism, the conversion of the barbarians and the significant reign of Charlemagne.

- 63. History of Europe, 814-1250.** Winter. M. W. F., 9:00. Three credit hours. R. B. Swensen. (Not given this year.)

A study of the social, economic, and religious changes implicit in Feudalism, the Crusades, and the rise of cities.

- 64. Close of the Middle Ages, 1250-1555.** M. W. F., 9:00. Three credit hours. R. B. Swensen. (Not given this year.)

Emphasis in this period will be placed on the rise and growing power of the Third Estate, the Renaissance, the Reformation, and the emergencies of monarchical states.

- 70. History of Europe, 1556-1815.** Autumn. M. W. F., 10:00. Three credit hours. Jensen.

A study of the revolutionary ideas that challenged the traditional views in science, theology, economics, and politics, and a consideration of the conflicts resulting therefrom.

- 71. Europe, 1815-1914.** Winter. M. W. F., 10:00. Three credit hours. Jensen.

A study of the revolutionary movements in America and Europe; the American and French revolutions; the period of reaction and emergence of liberalism and nationalism. The period from 1848 will be given special emphasis.

72. **Europe Since 1871.** Spring. M. W. F., 10:00. Three credit hours. Jensen. (Not given this year.)

73. **Contemporary World History.** Spring. M. W. F., 10:00. Three credit hours. Jensen.

This course deals with the outcome of the First World War, the political, economic, and social readjustments which followed, the causes and operation of the present war, and an examination of some of the fundamental postwar problems which affect a permanent peace.

80. **History of the American West.** Autumn. M. W. F., 11:00. Three credit hours. Snow.

America, the frontier of Europe. International rivalry for the Caribbean area; the Atlantic tide water and the Pacific Coast. Problems of the West to 1803.

81. **History of the West.** Winter. M. W. F., 11:00. Three credit hours. Snow.

The significance of the Frontier in the development of a distinctive Americanism; the West in national issues, 1803-1861.

82. **History of the West.** Spring. M. W. F., 11:00. Three credit hours. Snow.

The development and colonization of the Trans-Mississippi, the Rocky Mountains, and the Pacific West, 1803-1892. Special consideration will be given to the Mormon migration and the development of Utah.

85. **History of Hispanic America.** Autumn. M. W. F., 11:00. Three credit hours. Snow. (Not given this year.)

A brief survey of the colonial period, and a study of the causes and results of the wars for independence.

86. **History of Hispanic America.** Winter. M. W. F., 11:00. Three credit hours. Snow. (Not given this year.)

A study of the struggle for stable governments after independence was gained. The characteristics of special sections will be given consideration.

87. **History of Hispanic America.** Spring. M. W. F., 11:00.

Three credit hours. Snow. (Not given this year.)

In this quarter, careful consideration will be given to inter-American and international relations with special emphasis on the United States and Hispanic American peace and trade pacts.

90. **History of England to 1714.** Autumn. M. W. F., 10:00. Three credit hours. Jensen. (Not given this year.)

A study of the origin and development of the English people and English institutions from the earliest times to 1714. Special consideration is given to governmental development under the Tudors, the separation from the Roman Church, and the struggle of Divine right claims against the evolution of parliamentary sovereignty.

91. **History of England, 1714 to 1944.** Winter. M. W. F., 10:00. Three credit hours. Jensen. (Not given this year.)

The development of cabinet government, growth of the British empire, the political, economic, and humanitarian movements of the last two centuries, England's relations to her colonies and dominions, and her position in world affairs with special reference to her part in the First and Second World War.

93. **Constitutional History of England.** Spring. M. W. F. Three credit hours. (Not given this year.)

A study of English constitutional development from the Anglo-Saxon period to the present. Attention is given to the origin and evolution of the royal prerogative, the judicial and administrative systems, the growth of Parliament, the development of cabinet responsibility. The aim is to understand the processes which have resulted in the establishment of a constitutional democratic form of monarchy.

95. **American History to 1789.** Autumn. M. W. F., 9:00. Three credit hours. Jensen. (Not given this year.)

A study of colonial institutions and the constitutional relations between the colonies and the mother country; constitutional theories and principles involved in the Revolution; formation of the federal constitution.

96. **History of the United States, 1789 to 1865.** Winter. M. W. F., 9:00. Three credit hours. Jensen. (Not given this year.)

A study of the organization of the new government; the problems of nationality and state rights; the problems in-

volved in slavery and in the expansion of the nation; constitutional theory of the secession; constitutional aspects of the war power.

97. **History of the United States Since 1865.** Spring. M. W. F., 9:00. Three credit hours. Jensen. (Not given this year.)

Political, economic, and social reconstruction after the Civil War; industrial and economic expansion, the problem of insular possessions; World War 1 and its after-effects; economic depression, the "New Deal," and the relationship of the United States to the Second World War.

Graduate Courses

150. **Early Oriental History.** Problems of ancient civilizations.
151. **Grecian History.** A study of important problems dealing with the development of Greek life and culture.
152. **Roman History.** Problems of agrarian reform and Roman imperialism.
162. **Medieval History.** Studies dealing with the Papacy and Monasticism.
163. **Medieval History.** Problems relating to Feudalism, the Crusades, and the rise of cities.
164. **Medieval History.** Emphasis on the Renaissance, the Reformation, rise of the Third Estate, and the rise of monarchical states.
170. **Modern History.** A new science and philosophy of the seventeenth and eighteenth centuries.
171. **Modern History.** The struggle between liberalism and conservatism in the nineteenth century.
172. **Modern History.** Some problems connected with World War I and intricate world relations since then.
180. **History of the West.** The West as a factor in international rivalry to 1763, and as a potential force in the American revolution.
181. **History of the West.** The influence of the West in the opening of the Mississippi, the War of 1812, the American system, etc.

182. **History of the West.** The history of the Trans-Mississippi West, the Great Basin, etc.
185. **History of Hispanic America.** A study of colonial problems in Hispanic America. The movement for independence.
186. **History of Hispanic America.** Problems connected with the establishment of independent states.
187. **History of Hispanic America.** International and inter-American relations of Hispanic American states.
190. **History of England, 1066-1485.** A study of the rise of the bourgeoisie and the evolution of Parliamentary supremacy.
191. **History of England, 1485-1714.** An intensive study of the evolution of cabinet government, or the Machine Age and its industrial and social consequences.
192. **History of England, 1714-1944.** Expansion and industrialism and the new economic doctrine of laissez faire.
193. **Constitutional History of England.** Emphasis upon fundamental movements connected with English constitutional growth.
195. **American History.** Problems of Colonial and Revolutionary history.
196. **American History.** Topics in the development of American political and historical institutions.
197. **History of the United States.** Problems in recent American constitutional history.
198. **Problems in Historical Research.**
200. **Research for Master's Thesis.**

Home Economics

Professors Warnick, Larsen, Poulson; Associate Professor Barlow; Assistant Professors Hollingshead, Billings, Harris; Miss Reid.

It is advised that students of Home Economics who are preparing to enter the teaching profession take both major and minor in this department as this facilitates placement in teaching positions. Major and minor may be obtained in Clothing and Textiles, Foods and Nutrition and Household Administration. A Vocational Home Economics teaching major is also provided for. (For particulars see summary under "College of Applied Science" page 43.)

All freshmen who expect to major in Home Economics are required to take Household Administration 5. All teaching majors are required to take Household Administration 71, 72, and 73; Chemistry 21, 22, and 23; Bacteriology 21 and 22; Zoology 45 or 65; Art 21, 25, and 29. Four additional hours of Art may be elected.

It is suggested that students interested in Pre-nursing preparation register in the Department of Home Economics with a major in Foods and Nutrition. The following courses are recommended for such students: Foods and Nutrition 5, 10, 11, 12; Chemistry 21, 22, and 23; Bacteriology 21 and 22; Psychology 11; Zoology 45 or 65 and 66; Economics 1; Sociology 11; Household Administration 12 or 62; Freshman English, and Physical Education. These courses would provide an adequate foundation for Nurses' training and for a teaching major, should a student desire to return for a college degree.

The following courses fulfill the requirements prescribed by the American Dietetic Association for predietetic training; Chemistry 21, 22, 23, 6; Zoology 45 or 65 and 66, and 58; Bacteriology 21 and 22, Psychology 11 and 63; Sociology 11; Economics 1; Secondary Education 81, or Household Administration 71 and 72; Foods and Nutrition 10, 11, 12, 50, 51, 53, 54, 55, 56, and 75; Household Administration 65; Accounting and Business Administration 1.

Special emphasis to wartime needs will be given in all courses. In order to adapt to changing wartime situations, new courses may be organized upon request when deemed advisable.

CLOTHING AND TEXTILES

Clothing and Textiles 1, 2, 3, 55, 56, 60 and 61 or 15, 62, 65, 66, 68, and 69, are required of all who major in Clothing and Textiles. Other additional hours are elective with the advice of the major professor. Chemistry 21, 22, and 23, or equivalent, required.

Lower Division Courses

- 1 or 70. Clothing Selection and Construction.** Autumn. Daily. Sec. 1, 8:00. Sec. 2, T. Th. 2:00-5:00. Sec. 3, M. W. F., 3:00-5:00. Three credit hours. Billings and Harris.

Analysis of fashion trends as they effect the selection of personal clothing; study and basic measures used by commercial pattern makers and methods of adjusting the pattern to individual needs. Selection and construction of a tailored dress by the use of a commercial pattern. Laboratory hours to be arranged. Prerequisites or parallel, Art 21.

- 2 or 71. Clothing Design and Construction.** Winter. Sec. 1, Daily, 8:00. Sec. 2, T. Th., 1:00-3:00. Sec. 3, M. W. F., 3:00-5:00; Spring T. Th., 3:00-5:00. Three credit hours. Billings and Harris.

An analysis of garment design and personal line and color. Emphasis is placed on fabric and design as it affects the character of the costume. One garment is made. Laboratory hours to be arranged. Prerequisite or parallel, Art 25, Clothing and Textiles 1 or 70, or 5.

- 3 or 72. Spring Wardrobe Building.** Spring. Sec. 1, Daily, 8:00. Sec. 2, T. Th., 1:00-3:00. Two credit hours. Billings.

Selection and construction of the costume ensemble; the study and application of art principles to the selection of the wardrobe. Emphasis upon sewing techniques and short cuts to speed and efficiency. Construction of summer garments for street, daytime, and evening, and semi-tailored costumes; color harmonies of special interest. Laboratory hours to be arranged. Prerequisite: Clothing and Textiles 2 or 71.

- 5. Survey in Clothing and Construction.** Winter. T. Th., 2:00-5:00. Spring. T. Th., 2:00-5:00. Three credit hours. Harris.

Emphasis on selection and construction of a tailored

garment to teach correct techniques in the use of commercial patterns and construction skills. Adjustment of pattern to individual measures, analysis of color, line, and fabrics are stressed. Laboratory periods to be arranged. Prerequisite or parallel: Art 21. Accepted for Clothing and Textiles 1, on recommendation of instructor.

10. **Dress Design and Appreciation.** Autumn, Winter. M. W. F., 11:00. Three credit hours. Harris.

Selection and purchase of the personal wardrobe. Consideration will be given to the clothing budget, suitability of costume to use, care and repair of the personal wardrobe; good grooming, and relation of clothing to individual success. Open to all non-majors. Required of minors.

11. **Dressmaking.** Spring. M. W. F., 11:00. Two credit hours. Harris.

A course in clothing construction for non-majors. Based on the use of the commercial pattern and the development of good sewing techniques.

15. **General Textiles.** Autumn, Winter or Spring. M. W. F., 10:00. Three credit hours.

Fundamental textile fibers, yarns, weaves, color, and finishes with special references to selection of fabrics for clothing and the house. This course or equivalent is required of minors and students qualifying for a Vocational Teaching Certificate.

Upper Division Courses

52. **Children's Clothing.** Spring. M. W. F., 2:00. Two credit hours. (Not given this year.)

A consideration of design and construction of children's clothing suitable to various ages and types with special emphasis on physical and psychological needs of the child as related to clothing.

55. **The Family Clothing Problem.** Spring. M. W., 1:00-4:00. Three credit hours. Billings.

Study of the wardrobe needs of the family and problems relating to the purchase, care, and construction of the family clothing. To buy or to sew; a comparison of needs and values with some remodeling of garments to provide basis for comparison.

56. **Tailoring.** Winter. M. W., 1:00-4:00. Three credit hours. Billings.

Tailoring techniques applied in the construction of coats, suits, and dresses. Prerequisites: Clothing and Textiles 1, 2, and 3, or equivalent.

- 60, 61. **Advanced Textiles.** Autumn and Winter, T. Th. Two credit hours each quarter. (Not given this year.)

History of primitive and modern methods of manufacturing textile fibers. The construction and finish of fabrics and factors influencing the quality and cost.

62. **Economics of Clothing Selection.** Winter. T. Th, 10:00. Two credit hours. Harris.

A study of factors involved in the selection and purchase of clothing with special reference to existing guides and sources of buying information for the consumer-buyer. Field trips to stores and industries. Open to all upper division students.

65. **Historic Costume.** Winter. M. W. F., 11:00. Laboratory, F. Three credit hours. Billings.

Study of period costume as an expression of fashion which reflects the social and artistic life of the time. Emphasis is placed on those phases of costume which provide inspiration for modern design. Students of drama and pageantry will find special interest in this course.

66. **Costume Design.** Spring. M. W. F., 11:00. Laboratory, F. Three credit hours. Billings.

Principles of sketching and the interpretation of artistic design. Emphasis is placed on creative design by the use of motifs and fashion sources which will aid in the development of individual dress. Prerequisite: Clothing and Textiles 65.

67. **Advanced Clothing Construction.** Autumn. M. W., 10:00-12:00. Two credit hours. Billings.

Design and construction of daytime and evening garments. Training in fine techniques and artistic wardrobe assembling. Prerequisite: Clothing and Textiles 1, 2, and 3, or equivalent.

68. **Pattern Design and Draping.** Autumn. T. Th., 1:00-4:00. Three credit hours. Billings.

The principles of draping and dress design, cutting, fitting, and finishing. The basic muslin pattern is used to

facilitate efficient self-fitting. Two garments are designed, cut, fitted, and finished. Laboratory hours to be arranged for sewing work as class hours will be confined to problems of design and style. Prerequisites: Clothing and Textiles 1, 2, 3; 60 or 15.

69. **Recent Developments in the Textile Field.** Spring. T. Th., 10:00. Two credit hours.

Readings, reports, and discussions based on the current literature and research being done in the textile and clothing field. Prerequisites: Clothing and Textiles 1, 2, 3, 60, 61, 65, and 66.

Graduate Courses

101. **Clothing Selection and Construction.** Autumn. M. T. W. Th. Three credit hours. Billings.
102. **Clothing Design and Construction.** Winter. M. T. W. Th. Three credit hours. Billings and Harris.
- 160,161. **Textiles.** Autumn and Winter. T. Th. Two credit hours each quarter. (Not given this year.)
162. **Economics of Clothing.** Winter. T. Th., 10:00. Two credit hours. Harris.
168. **Pattern Design and Draping.** Spring. T. Th., 11:00. Three credit hours. Billings.

FOODS AND NUTRITION

Foods and Nutrition 10, 11, 12, 50, 53, 54, 55, 56, and 15 or 75, are required of all who major in Foods and Nutrition. Other additional hours are elective with the advice of the major professor. Chemistry 21, 22, and 23, or equivalent, required.

1. **Food Problems in the Home.** Autumn, Winter or Spring. T. Th. Lecture, 2:00-3:00. Laboratory, 3:00-5:00. Three credit hours.

Selection, preparation and care of food in the home. Open to all non-majors.

4. **Cookery Problems for Men.** Autumn or Winter. M. W. F. One lecture and two laboratory periods, 9:00. Two credit hours. Hollingshead. (Not given this year.)

For men desiring experience in simple meal preparation.

- 5. Elementary Nutrition.** Autumn, Winter, and Spring. 10:00. Three credit hours. Barlow.

The study of the fundamentals of nutrition and the use of the diet in maintaining physical fitness. Open to men and women. Required of majors in vocational education.

- 10 or 70. Principles of Cookery and Food Preservation.** Autumn. M. W. Lecture 1:00-2:00. Laboratory, Sec. 1, T. Th., 1:00-3:00. Sec. 2, M. W., 3:00-5:00. Three credit hours. Barlow.

Special attention is given to the principles of carbohydrate cookery and to food preservation. Chemistry 21 is a prerequisite or parallel except on approval of instructor.

- 11 or 71. Principles of Cookery and Food Preservation.** Winter. M. W. Lecture 1:00-2:00. Laboratory, Sec. 1, T. Th., 1:00-3:00. Sec. 2, M. W., 3:00-5:00. Three credit hours. Barlow.

Special attention is given to the principles involved in the cookery of protein foods and fats and to experimental methods of cookery. Chemistry 22 is a prerequisite or parallel except on approval of instructor.

- 12 or 72. Menu Planning and Meal Service.** Spring. M. W. Lecture, 1:00-2:00. Laboratory, Sec. 1, T. Th., 1:00-3:00. Sec. 2, M. W., 3:00-5:00. Three credit hours. Barlow.

Experience is given in menu-planning, food buying, and meal service of various types. Prerequisites: Foods and Nutrition 10 and 11. Chemistry 23 is a prerequisite or parallel except on approval of instructor.

- 15 or 75. Food Economics.** Autumn. T. Th. 10:00-11:00. F., 3:00. Three credit hours.

Food purchasing as affected by markets, advertising, brands, and other factors.

Upper Division Courses

- 50. Large Quantity Cookery.** Autumn, Winter, Spring. Daily, 10:00-1:00. Five credit hours.

Practical experience in the preparation of food, management, large quantity marketing, and simple accounting applied to the institutional field. Prerequisites or parallel: Foods and Nutrition 10, 11, 12. Limited to six students each quarter. Register in Autumn for the year.

51. **Institutional Management.** Winter. Time to be arranged. Two or more credit hours.

For girls preparing for dietetic training or institutional management.

52. **Nutrition of Children.** Autumn. M. W. F., 8:00. Three credit hours. (Not given this year.)

Nutritional requirements and feeding problems of pregnancy, infancy, and pre-school child.

53. **Nutrition.** Autumn. M. W. F., 9:00. Laboratory, Th., 3:00-5:00. Four credit hours. Barlow.

A study of fundamental principles of Nutrition and their reaction to health and growth. Prerequisites: Chemistry 23, and Foods, 12.

54. **Dietetics.** Winter. M. W. F., 9:00. Laboratory, Th., 3:00-5:00. Four credit hours. Barlow.

A study of the requirements of normal individuals and calculation of dietaries to meet these needs. Prerequisites: Chemistry 23, Foods 53, or consent of instructor.

55. **Nutrition in Disease.** Spring. M. W. F., 9:00. Laboratory, Th., 2:00-5:00. Four credit hours. Barlow.

This course deals with the value of food in maintaining health. Emphasis is placed on special diets for different diseases. Prerequisites: Courses 53 and 54.

56. **Readings in Nutrition.** Winter. T., 3:00-5:00. Two credit hours. Barlow.

Required of all senior girls majoring in Foods and Nutrition.

57. **Advanced Food Preparation.** Winter. T. Th., 1:00. Laboratory, Th., 3:00-5:00. Three credit hours.

Factors affecting the preparation of standard food products from the experimental viewpoint. Prerequisite: Foods and Nutrition 10, 11, and 12, or equivalent.

58. **Experimental Animal Nutrition.** Open to seniors and graduates only. Johanson.

This course is designed to acquaint students with the methods used in small animal experimentation. One hour lecture. Laboratory time and credit to be arranged. Prerequisite: 5 hours in organic or biochemistry and courses 53 and 54.

Graduate Courses

- 150. **Large Quantity Cooking and Marketing.** Autumn, Winter, Spring. Daily, 10:00. Five credit hours.
- 153. **Nutrition.** Autumn, M. W. F., 9:00. Laboratory. Th., 3:00-5:00. Four credit hours. Barlow.
- 154. **Dietetics.** Winter. M. W. F., 9:00. Laboratory, Th., 3:00-5:00. Four credit hours. Barlow.
- 155. **Nutrition in Disease.** Spring. M. W. F., 9:00. Laboratory, Th., 3:00-5:00. Four credit hours. Barlow.
- 156. **Readings in Nutrition.** Winter. T., 3:00-5:00. Two credit hours. Barlow.

HOUSEHOLD ADMINISTRATION

Household Administration 12, 60, 61, 80, 81, 63, 64, 65, are required of all who major in Household Administration. Other additional hours are elective with the advice of the major professor. Chemistry 21, 22, 23, or equivalent, required.

Lower Division Courses

- 1. **Household Problems.** Spring. T. Th., 9:00. Two credit hours. Warnick.

This course will present the most important problems in the organization and management of the household.

- 5. **Introduction to Home Economics.** Autumn. F., 3:00. One credit hour. Warnick.

Designed to orient beginning students in the field of home economics. Vocational opportunities for women trained in home economics are investigated. Required of all freshmen majoring in the department.

- 10. **Family Health.** Autumn. M. W. F., 9:00 Three credit hours. Warnick.

A consideration of factors underlying health; methods concerned with the control and prevention of communicable and infectious diseases; home care of the sick. This course will give special emphasis to wartime and emergency needs.

- 12 or 62. **Family Relationships.** Spring. M. W. F., 2:00. Three credit hours. Warnick.

The modern family, its functions and structure; present social conditions affecting its stability and pattern; responsibilities and contributions of members of the family. Analysis of relationships that make for satisfactions in family life.

- 20 or 80. Child Care.** Autumn. T. Th., 2:00. Two to three credit hours. Warnick.

Problems of prenatal and infant care; physical and mental standards of development; general care and hygiene of mother and child.

- 21 or 81. Child Development.** Winter. T. Th., 2:00 Two to three credit hours. Warnick.

Habit formation and behavior problems of the infant and pre-school child; home influence in the care and training of children; observation of children in the kindergarten and nursery school.

- 22 or 82. Child Development.** Spring. Th., 8:00. Two to three credit hours. Warnick.

Observation of and participation in the managerial activities of the nursery school. Philosophy of nursery school education and its application to the home situation. Prerequisites: Household Administration 80 and 81.

Upper Division Courses

- 52, 53, 54. Interior Decoration.** Autumn, Winter, Spring. T. Th., 9:00. Two credit hours each quarter. Larsen. Prerequisites: Art 21, 25, 29. (See Art 91, 92, 93.)

- 60. Home Management.** Spring. M. W. F., 8:00. Three credit hours. Warnick.

An analysis of the problems involved in the efficient management of family resources and household tasks and the relation of management to the personal aspects of family life.

- 60b. Home Management House.** Three credit hours.

Consists of half-quarter's residence in home management house with actual experience in the purchasing and preparation of foods, meal planning, and service, house-keeping, household records, hospitality, and group relationships. Applications should be made by the end of the winter quarter preceding. Household Administration 60 precedes or parallels this course. (Not given this year.)

61. **Economic Problems of the Family.** Winter. M. W. F., 8:00. Three credit hours. Warnick.

Study of those economic problems most directly concerning the family of today, discussion of family income, its size, sources, adequacy; income apportionment and expenditure. For men and women students.

63. **The Consumer and the Market.** Winter. M. W. F., 2:00. Three credit hours. Warnick.

An analysis of the economic position of the consumer as a buyer; organization and function of the market price policies, selling methods in the retail market, retailing activities and their costs, and market control through legislation. Open to men and women students.

64. **Housing Problems of the Modern Family.** M. W. F., 8:00. Three credit hours. Warnick.

The social, economic, and functional aspects of housing; Federal legislation and organizations promoting better housing; the family dwelling from the standpoint of family needs and interests. Open to men and women students.

65. **Equipment.** Spring. M. W. F., 10:00. Three credit hours. Barlow.

A study of electrical and non-electrical equipment for the home. Fundamental factors determining selection and use and care. Open to men and women students.

68. **Psychology of Childhood and Adolescence.** Winter. M. W. F., 10:00. Three credit hours. Poulson. (See Psychology 68.)

69. **Mental Hygiene.** Spring. M. W. F., 10:00. Three credit hours. Poulson.

- 71.* **Philosophy and Historical Development of Home Economics.** Spring. T. Th., 1:00. Two credit hours. Reid.

The historical development, growth; present scope and trend; objectives of home economics education; its organization and relationship to the present educational set-up. Requires the completion of one summer project.

- 72.* **Methods of Teaching Home Economics.** Autumn. T. Th., 2:00. Two credit hours. Reid.

Teaching methods as applied to home economics curriculum content, equipment and teaching facilities; laboratory arrangement and management.

- 73.* Special Problems in Teaching Home Economics.** Spring. T., 8:00. One credit hour. Warnick.

For all senior majors who are qualifying for a teaching certificate.

Graduate Courses

- 160. Home Management.** Spring. M. W. F., 8:00. Three credit hours. Warnick.
- * Household Administration 71, 72, 73, fulfill special methods requirements for a vocational education teaching certificate.
- 161. Economics of the Household.** Winter. M. W. F., 8:00. Three credit hours. Warnick.
- 164. Housing Problems of the Family.** Autumn. M. W. F., 8:00. Three credit hours. Warnick.
- 173. Special Problems in Teaching Home Economics.** Spring. T., 8:00. One credit hour. Warnick.
- 180. Child Care.** T. Th., 2:00. Two credit hours. Warnick.
- 181. Child Development.** Winter. T. Th., 2:00. Two credit hours. Warnick.
- 182. Seminar in Child Development.** Spring. Th., 8:00. One credit hour. Warnick.

* Household Administration 71, 72, 73, fulfill special methods requirements for a vocational education teaching certificate.

Horticulture and Landscape Architecture

Mr. Wallace, Mr. Reimschiissel, Professor Snell.

HORTICULTURE

Students majoring in this department may emphasize either Pomology or Ornamental Horticulture with Landscape Architecture.

Lower Division Courses

1. **Principles of Pomology.** Autumn. M. W. F., 9:00. Three credit hours. Staff.

The principles underlying profitable orchard management will be studied.

2. **Truck Crops.** Winter. M. W. F., 8:00. Three credit hours. Wallace.

Fundamental principles underlying the production of vegetable crops.

5. **Herbaceous Plant Materials.** Autumn. T. Th., 8:00. Two credit hours each quarter. Reimschiissel. (Offered in alternate years. Not given this year.)

Annual, biennial and perennial plants for landscape effects, and for soil erosion control will be studied. Botanical characteristics and cultural methods are considered. Native plants are studied as well as exotics.

6. **Herbaceous Plant Materials.** Spring. T. Th., 8:00. Two credit hours. Reimschiissel. (Offered in alternate years. Not given this year.)

Annual, biennial, and perennial plants that flower in the Spring are studied as to landscape effect and erosion control.

8. **Trees and Shrubs.** Autumn. T. Th., 8:00. Laboratory, F., 2:00-5:00. Three credit hours. Reimschiissel. (Not given this year.)

Botanical characteristics of native and cultivated plants used for landscape effects and for soil erosion control. Emphasis placed on Autumn and Winter characteristics and effects.

9. **Trees and Shrubs.** Spring. T. Th., 8:00. Laboratory, F., 2:00-5:00. Three credit hours. Reimschiessel. (Not given this year.)

Botanical characteristics of native and cultivated trees and shrubs used for landscape effects and for soil erosion control. The student learns to identify a large number of trees and shrubs, and also how to use them to advantage. Spring and summer characteristics and effects emphasized.

11. **Plant Propagation.** Spring. M. W. F., 9:00. Three credit hours. Staff.

A study of the methods of plant reproduction will be made which will include Greenhouse and Nursery practice.

12. **Plant Propagation Laboratory.** Spring. T. Th., 2:00-4:00. Two credit hours. Staff.

Laboratory course in Plant Propagation designed to accompany Horticulture 11.

13. **Canning Crops.** Autumn. M. W. F., 10:00. Three credit hours. Wallace.

Principles of growing, harvesting, and handling of fruit and vegetable crops for canning. Insect and pest control will be considered.

14. **Preservation of Horticultural Products.** Autumn. T. Th., 11:00. Laboratory, F., 2:00-5:00. Three credit hours. Wallace.

Principles involved in canning, freezing, drying, and fruit juice extraction, emphasis being placed upon the utilization of many fruit and vegetable products which have been waste in the past. A laboratory period will be given to provide actual experience in some of these processes. Class open to anyone, particularly agricultural and home economic students.

32. **Marketing Fruits and Vegetables.** Spring. M. W. F., 11:00. Three credit hours. Staff.

This course will deal more specifically with the fruit and vegetable products as affected by ordinary marketing procedure. Harvesting, packing, transportation and storage will receive major attention.

40. **Weed Plants and Seeds.** Autumn. T. Th., 2:00-5:00. Three credit hours. Staff.

The important weeds occurring in Utah and their control. Study will be made of the weed seeds likely to occur in commercial seed.

Upper Division Courses

52. **Systematic Pomology.** Autumn. T. Th., 1:00. Laboratory, F., 2:00-5:00. Two or three credit hours. Staff. (Not given this year.)

Emphasis placed on the identification, description, and nomenclature of fruits and fruit trees.

53. **Advanced Pomology.** Winter. M. W. F., 1:00. Three credit hours. Staff. (Not given this year.)

A technical course based upon plant physiology and morphology as applied to fruit producers.

55. **Orchard Practice.** Spring. Time to be arranged. One credit hour. Staff.

A study of horticultural problems in Utah. Orchards and plantations will be visited and studied.

56. **Nursery Practice.** Spring. Time to be arranged. One credit hour. Reimschiessel. (Not given this year.)

The student will be given practical problems of nursery practice. Emphasis on spraying, pruning, and transplanting.

58. **Seed Analysis.** Time to be arranged. Two credit hours. Staff.

A course given to qualify students as seed analysts for private seed companies or state agencies. Prerequisite: Horticulture 40.

59. **Plant Genetics.** Winter. M. W. F., 9:00. Three credit hours. Wallace.

A study of plant genetics in relation to improvement of plants. Methods of hybridizing and selection as practiced in Europe and America.

60. **Biometry.** Spring. M. W. F., 10:00. Three credit hours.

Application of statistical principles to the design of biological experiments and the analysis of the data. Prerequisites: Mathematics 11.

69. **Food Bacteriology.** Spring. M. W. F., 8:00. Laboratory, T. Th., 1:00-3:00. Five credit hours. Martin and Wallace.

Principles of food preservation and processing and the relation of microorganisms in the food industry. Laboratory analysis of food products.

- 91, 92, 93. Seminar. Autumn, Winter, Spring. One credit hour each quarter. Staff.

Current horticultural literature will be reviewed. For seniors majoring in horticulture.

96. Special Problems in Horticulture. Autumn, Winter, or Spring. Credit and subject matter to be arranged. Staff.

LANDSCAPE ARCHITECTURE

1. Elementary Landscape Architecture. Autumn and Spring. M. W. F., 8:00. Three credit hours. Staff. (Not given this year.)

This course is designed to fit the needs of all students. Principles of design and composition as applied to landscape architecture with emphasis on home ground developments. A foundation to all courses in landscape architecture.

13. Elements of Drawing. Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell. (See Drawing 13.)

21. History and Literature of Landscape Architecture. Autumn. M. W. F., 9:00. Three credit hours. Staff. (Offered in alternate years; not given this year.)

Contributions of various civilizations from ancient Egypt to the present will be discussed. Emphasis on Italian Renaissance, English, French, and American styles.

24. Landscape Design. Winter. M. W. F., 2:00-5:00. Three credit hours. Staff. (Not given this year.)

The design of gardens and private grounds on flat surfaces. A fundamental course to all landscape design. Prerequisite: course 1.

25. Landscape Design. Spring. M. W. F., 1:00-4:00. Three credit hours. Staff. (Not given this year.)

Designing land surfaces to fit the setting. Private and public grounds considered. Prerequisite: course 24.

Upper Division Course

53. City Planning. Winter. Daily, 10:00. Five credit hours. Staff. (Offered in alternate years; not given this year.)

The history of various types of city plans; advantages and disadvantages. Appreciation of community development. Emphasis on Salt Lake City, Washington, D. C., and Paris.

Journalism

*Professors Pardoe, Hales; E. M. Jenson; Mr. Smith,
Mr. Morton.*

English 1, 2, and 3, are prerequisites for all courses in Journalism except Courses 1, 7, 10, 11, 12, 13, 14, 15, 16, and 26, which may be taken in connection with Freshman English.

Students who elect to major in Journalism must present thirty hours of credit in Journalism and twenty-one hours in English in addition to Freshman English. The following courses are required: Journalism 7, 11, 12, 13, 21, 22, 51, 52, 55, 56, 70.

The following are suggested as minors for students who major in Journalism: Accounting and Business Administration, Art, Economics, History, Office Practice, Political Science, Sociology.

Journalism is one of the subjects comprising the composite major in **Language Arts** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **Introduction to Journalism.** Autumn. T. Th., 9:00. Two credit hours.
A study of the vocational and cultural aspects of Journalism.
7. **Ethics of Journalism.** Spring. T. Th. 1:00. Two credit hours.
The moral aspects of Journalism—ideals and abuses.
10. **Problems of Citizenship.** Spring. Daily, 11:00. Five credit hours. (See Political Science 11.)
- 11, 12, 13. **Campus Reporting.** Autumn, Winter, Spring. M., 3:00. One credit hour each quarter. Limited to members of "Y" News staff. Prerequisite: consultation with instructor.
- 14, 15, 16. **Commercial Art.** Autumn, Winter, Spring. One or two credit hours each quarter. E. M. Jenson. (See Art 14, 15, 16.)

- 21. News and Newswriting.** Autumn. M. W. F., 11:00. Three credit hours.

A study of what constitutes news, and practice in gathering and writing news copy. Ability to operate a type-writer is necessary.

- 22. News Reporting.** Winter. M. W. F., 11:00. Three credit hours. Prerequisite: Journalism 21. A study of news gathering techniques and beat reporting.

- 23. Editing and Makeup.** Autumn. M. W. F., 10:00. Three credit hours. Prerequisite: Journalism 21.

- 26. Photography.** Spring. Lectures, M. W. F., 8:00. Laboratory time to be arranged. Four credit hours. Hales. (See Physics 26.)

- 27. News Photography.** Autumn. Lecture, T., 1:00. Two credit hours. Laboratory time to be arranged. Morton and photography staff. Prerequisites: Journalism 26 and consultation with instructor.

Lectures on the principles of press photography, and laboratory exercises in the use of photographic equipment for the taking and developing of news pictures.

Upper Division Courses

(Not available to Freshmen.)

- 51. Editorials and Editorial Writing.** Winter. T, Th., 9:00. Two credit hours.

A study of the editorial and the practice of writing it.

- 52. Special Feature Articles.** Autumn. M. W. F., 9:00. Three credit hours. Prerequisites: Journalism 21, or permission of instructor.

Study of newspaper and magazine special feature articles: types, and sources. Help will be given in planning and marketing articles.

- 53. Reporting Public Affairs.** Winter. M. W. F., 9:00. Three credit hours.

A study of writing political columns and covering city and county building and state capitol beats. Prerequisites: Journalism 10 or Political Science 11 and Journalism 21 and 22.

54. **Critical News Writing.** Spring. M. W. F., 9:00. Three credit hours. Prerequisites: Journalism 21, 22 and at least four hours' credit in appreciation of literature or music or in history of drama development or types of world drama.

A study of reporting musical events and drama and writing book reviews.

- 55, 56. **History of Journalism.** Winter, Spring. M. W. F., 10:00. Three credit hours each quarter.

The beginning of journalism, the development of the English as well as the American press and the growth of American journalism to the present. A brief treatment of Utah journalism will conclude the course.

57. **Short Story Writing.** Autumn. T. Th., 2:00. Two credit hours. (Not given this year.)

The greater part of the student's time is given to practice in writing short stories.

58. **Radio Broadcasting.** Autumn. M. W., 3:00. Two credit hours. Pardoe, Morley and Staff. (See Speech 58. Speech 59 and 60 also will count toward a Journalism major.)

59. **Advertising.** Spring. Daily, 9:00. Five credit hours. Taylor. (See Marketing 59.) Arrangements for Journalism majors to enter this course must be made through the Department of Journalism.

60. **Problems of the Weekly Paper.** Spring. T. Th., 9:00. Two credit hours. Morton. Prerequisites: Journalism 21, 23.

The country weekly, its place in American life, and its possibilities. Conferences are arranged with editors of weeklies.

- 61, 62, 63. **Commercial Art.** Autumn, Winter, Spring. Two to four credit hours each quarter. E. M. Jenson. (See Art 61, 62, 63.)

65. **Publicity.** Spring. M. W. F., 11:00. Three credit hours. Prerequisite: Journalism 21.

A study of the approach to the public consciousness through the newspaper, the lecture, the radio address; the purpose and methods of publicizing.

70. **City Reporting.** Winter or Spring. M., 4:00. Four credit

hours. Prerequisites: Journalism 21 and 22, and consultation with head of department.

Methods of gathering and reporting news. Students will gather news in the regular channels in the city of Provo and will have experience in reporting for the daily press.

76. **Advanced Photography.** Spring. Lecture, T., 8:00. Laboratory time to be arranged. Two credit hours. Hales. (See Physics 76.)

- 87 **Teaching of Journalism.** Spring. T. Th., 4:00. Two credit hours. (Not given this year.)

Designed for Journalism majors and English majors who expect to teach in high school. It includes problems of supervision.

- 91, 92, 93. **Special Studies in Journalism.** Autumn, Winter, Spring. Time to be arranged. One or two credit hours each quarter.

Designed to meet special needs of students, these studies afford opportunities to do research work in the history of journalism, newspaper practice, etc.

Graduate Courses

153. **Reporting Public Affairs.** Winter. M. W. F., 9:00. Three credit hours. See Journalism 53.

- 155, 156. **History of Journalism.** Winter, Spring. M. W. F., 10:00. Three credit hours each quarter.

- 191, 192, 193. **Special Studies in Journalism.** Autumn, Winter, Spring. Time to be arranged. One to two credit hours.

Library

*Miss Ollorton, Miss Rich, Mr. Clark, Mrs. Knight;
Assistant Professor Hammond.*

Lower Division Courses

11. **Use of Books and Libraries.** Autumn, Winter, or Spring. Th. One credit hour.

The purpose of this course is to help students to become efficient in using books and libraries. The use of reference books and an understanding of the card catalogue will receive special emphasis.

12. **History of the Book.** Autumn or Winter, M. W. F., 4:00. Three credit hours. Clark.

The book and its physical structure through the ages.

Upper Division Courses

63. **Library Science for Teachers.** Winter. M. W. F., 3:00. Three credit hours.

This course is designed for prospective teachers and school administrators. It will include the study of school library organization and basic reference books and will provide practice in the use of library materials. This is the course required by the Department of Elementary Education for its majors.

68. **Juvenile Literature.** Autumn, Spring. T. Th., 8:00. Two credit hours. Hammond.

A study from the literary and educational points of view of the best literature available for children.

69. **Juvenile Literature.** Winter. T. Th., 8:00. Two credit hours. Hammond.

A study of literature to give a basis of selection, appreciation and presentation of the best and most suitable material for the elementary school.

Mathematics

Professors Eyring, Marshall, Hales.

Students who major in Mathematics have the following courses prescribed: Mathematics ~~1~~, 12, 13, 50, 51, 52, 70, 71. A teaching major is the same as Department major. Mathematics 1 may not be included in the major or minor requirements.

Mathematics is one of the subjects comprising the composite majors in **Mathematics and the Physical Sciences** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **Algebra.** Autumn, Winter, or Spring. Daily, 8:00. Five credit hours. Staff.
Review of elementary algebra, quadratic equations, ratio and proportion, progressions, binomial theorem, etc. Prerequisite: One year of high school algebra.
11. **College Algebra.** Daily. Autumn, 8:00. Winter, 9:00. Five credit hours. Staff. Prerequisite: Mathematics 1, or its equivalent.
12. **Plane Trigonometry.** Daily. Autumn, 9:00. Winter, 8:00. Five credit hours. Staff. Prerequisite: Mathematics 1, or its equivalent.
13. **Analytic Geometry.** Spring. Daily, 8:00. Five credit hours. Staff.
A study of rectangular co-ordinates, straight line, circle, parabola, ellipse, hyperbola, transfer of co-ordinates, etc. Prerequisites: Mathematics 11 and 12.
20. **Solid Geometry and Spherical Trigonometry.** Spring. Daily, 9:00. Five credit hours. Staff. Prerequisite: Mathematics 12.
34. **Commercial Algebra.** Autumn. M. W. F., 2:00. Three credit hours.
A review and drill in the essentials of algebra and the application of it to commercial problems.
35. **Mathematical Theory of Investments.** Winter. M. W. F., 2:00. Three credit hours. (See Accounting and Business

Administration 35.) Prerequisites: Mathematics 34, or equivalent.

Application of algebra to general business problems such as annuities, amortization, capitalization, depreciation, sinking fund, bond values, and building and loan associations.

Upper Division Courses

- 50. Differential Calculus.** Autumn. Daily, 9:00. Four credit hours. Staff.

An introductory course with numerous applications of the principles to the tracing of curves and the solution of problems from geometry and mechanics. Prerequisite: Mathematics 13.

- 51. Differential Calculus.** Winter, Daily, 9:00. Four credit hours. Staff.

Continuation of Course 50.

- 52. Integral Calculus.** Spring. Daily, 9:00. Four credit hours. Staff.

The process of integration is developed and applied to problems in geometry, mechanics, and physics. Prerequisite: Mathematics 51.

- 70. Definite Integrals.** Autumn. M. W. F., 10:00. Three credit hours.

Development of the definite integral as a sum, and the more theoretical aspects of calculus. Prerequisite: Mathematics 52.

- 71. Differential Equations.** Winter. Daily, 2:00. Five credit hours. Staff.

Differential equations of the first order, linear differential equations, total and partial differential equations with numerous applications to physics. Junior or senior year. Prerequisite: Mathematics 70.

- 81. Theoretical Mechanics.** Winter. Daily, 8:00. Five credit hours. Staff.

Fundamental principles of mechanics and their applications to physical problems. Prerequisites: Calculus and Physics 41, 42, 43.

Graduate Courses

- 101. Vector Analysis.** Winter. M. W. F. Three credit hours. Marshall. (Not given this year.)
Fundamental operations of vector analysis.
- 102. Vector Analysis.** Spring. M. W. F. Three credit hours. Marshall. (Not given this year.)
Application of vector analysis to mechanics, electromagnetic theory, and other branches of mathematical physics.
- 105. Advanced Calculus.** Autumn. Daily, 8:00. Five credit hours. Marshall. (Not given this year.)
A review of the fundamental theory of the calculus presented with a view to precision of statement and accuracy of proof. Prerequisite: Mathematics 72.
- 106. Advanced Calculus.** Winter. Daily, 8:00. Five credit hours. (Not given this year.)
Theory of differential equations, study of simple integrals, multiple integrals, and infinite integrals.
- 107. Advanced Calculus.** Spring. Daily, 8:00. Five credit hours. Marshall. (Not given this year.)
Study of some classes of functions defined by integrals; introduction to calculus of variations, and theory of functions. Note: Courses 105, 106, and 107, will follow an outline somewhat as given in Wood's "Advanced Calculus."
- 171. Differential Equations.** Winter. Daily, 2:00. Five credit hours. Marshall.
- 192. Readings in Mathematics.** Credit, one to three hours, depending on the work done, Marshall and Hales.
- 200. Thesis in Mathematics.** Credit to be arranged.

Mechanic Arts

Professors Snell, Hansen, Larsen; Mr. M. Snell.

Credit in shop courses in Mechanics is given on the basis of three hours for nine hours' application each week during the quarter.

MECHANICS**Lower Division Courses**

1. **Art Metal Work.** Autumn, Winter, or Spring. T. Th., 1:00-3:00. Two credit hours. Snell. Prerequisite: Drawing 1. (Not given this year.)
5. **Ornamental Iron Work.** Autumn. T. Th., 1:00-3:00. Two credit hours. Snell. (Not given this year.)
Craftsmanship in wrought iron, copper, brass, etc. Designing, cutting, sawing, bending, drilling, tapping, threading, hammering, finishing, etc. Lectures and outside preparation.
7. **Tool Technique.** Autumn, Winter, or Spring. M. W. F., 1:00-3:00. Two credit hours. Snell.
Required of all mechanics majors. Sharpening, care and use of woodworking hand tools, applied in fundamental principals of sawing, joining, fitting, fastening, etc.
11. **Elementary Auto Mechanics.** Autumn. Daily, 1:00-3:00. Two or three credit hours.
Construction of the automobile and an elementary study of the principles involved. Lubrication, assembling and repairing of brakes, rear axles, transmission systems and engines.
12. **Elementary Auto Mechanics.** Winter. Daily, 1:00-3:00. Two or three credit hours.
Construction and adjustment of carburetors and ignition system.
13. **Elementary Auto Mechanics.** Spring. Daily, 1:00-3:00. Two or three credit hours.
Ignition, timing, "trouble shooting," battery work and starting and lighting systems.
17. **Wood Turning.** Autumn, Winter, or Spring. Daily or M. W. F., 1:00-3:00. Two or three credit hours. Snell.
Exercises and projects in wood turning executed through individual designs.
18. **Pattern Making.** Autumn, Winter, or Spring. Daily or M. W. F., 1:00-3:00. Two or three credit hours. Snell.
The principles of pattern making are taught through the making of simple patterns for machine parts.

19. **Wood and Metal Finishing.** Autumn, Winter, or Spring. M. W. F., 1:00-3:00. Two credit hours. Snell.

Preparation of surfaces for the application of finishes, staining, painting, varnishing, lacquering, polishing etc. Use of the brush and air gun.

21. **Upholstering and Seat Weaving.** Autumn, Winter, Spring. Daily or M. W. F., 1:00-3:00. Two or three credit hours. Snell.

Typical forms of upholstery, including foundations with and without springs. Seat and panel weaving with cane and fiber.

27. **Cabinet Construction.** Autumn. Daily or M. W. F., 1:00-3:00. Two or three credit hours each quarter. Snell.

Drawings are submitted and the article is made to conform to these. Woods commonly used in cabinet work are studied as to their adaptability and finishing qualities; veneering, inlaying, and polishing.

28. **Cabinet Construction.** Winter. Daily or M. W. F. Snell. Continuation of 27.

29. **Cabinet Construction.** Spring. Daily or M. W. F. Snell. Continuation of 28.

Upper Division Courses

51. **Ignition.** Autumn. Daily, 3:00-5:00. Two or three credit hours.

Battery and magneto ignition. Study and practice of the principles involved in testing for troubles and making adjustments.

52. **Generators and Starting Motors.** Winter. Hours and credits as in 51.

The working principles of the dynamo, and testing for shorts and open circuit. Reverse current cutouts, types of generator regulation as third brush control systems and generator output.

53. **Machine Work and Welding.** Spring. Hours and credit the same as in 51.

Drill-press, lathe, and planer work. Principles of cutting tools, forging and tool sharpening. The use of the torch in cutting and welding.

57. **Standard Construction Methods.** Autumn, M. W. F., 10:00. Three credit hours. Snell.

This course deals with the theoretical side of building. Location, soil conditions, footings, materials, equipment, etc. (Given in alternate years.)

58. **Carpentry.** Autumn, Winter, or Spring. Daily, 1:00-3:00. Three credit hours. Snell.

Thorough drill in saw filing. Tool practice applied in practical problems. Fitting and hanging doors and windows, built-in cabinets, stair construction and framing. Prerequisite: Course 7, and Drawing 13.

59. **Estimating.** Spring. M. W. F., 10:00. Three credit hours. Snell.

Interpretation of plans and specifications. Methods of estimating and figuring costs of materials and labor. Permits, contracts, liens. Prerequisite: Drawing 13. (Given in alternate years.)

64. **Mill Work—Woodworking Machinery.** Autumn, Winter, Spring. Daily or M. W. F., 1:00-3:00. Two or three credit hours. Snell.

Work will be handled as nearly as possible as in actual practice. Estimates and working drawings will be made and a careful check of material and labor kept and computed for each job.

- 65, 66, 67. **Shop Work.** Autumn, Winter, Spring. Daily or M. W. F., 1:00-3:00. Two or three credit hours. Snell.

Advanced work, consisting of the erection of buildings, cabinet work, upholstering, pattern work, or novelty work. Prerequisites: Courses 57, 58, 59, or their equivalent.

DRAWING

While courses are listed according to quarters, any course may be taken any quarter, provided prerequisites have been met. Extra laboratory periods in Drawing, M. T. W. Th., 1:00-4:00.

Lower Division Courses

1. **Theory and Practice of Design.** Autumn. M. W. F., 1:00. Two credit hours. Larsen. (See Art 21.)

2. **Free-hand Lettering.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Practice in lettering as applied in architectural and engineering office work.

3. **Engineering Drawing.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

The care and use of instruments, lettering, applied geometry, and orthographic projection. A beginning course.

4. **Engineering Drawing.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Pictorial representation, developed surfaces, and intersections.

5. **Engineering Drawing.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Prerequisites: Drawing 4, or equivalent.

6. **Descriptive Geometry.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

A study of the principles relating to the point, line plane, cylinder, cone and double-curved surfaces of revolution, with application to practical problems. Prerequisites: Drawing 4 and 5.

7. **Descriptive Geometry.** Autumn, Winter or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Continuation of 6.

8. **Elementary Machine Design.** Autumn. Daily, 9:00 or 11:00. Two credit hours. Snell.

Drawing of machine fastenings, such as bolts, screws, rivets, keys, etc. Dimensionings, working drawings and technical sketching. Detail and blueprints. Prerequisites: Drawing 4, 5, 6.

9. **Elementary Machine Design.** Winter. Daily, 9:00 or 11:00. Two credit hours. Snell.

Continuation of 8.

10. **Shades and Shadows.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Planned to give fundamental knowledge necessary for casting shadows in architectural design.

11. **Instrumental Perspective.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

The theory and application of methods of drawing architectural perspectives.

12. **Rendering.** Autumn, Winter, or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Wash rendering practice plates and rendering of architectural elements.

13. **Architectural Drawing.** Autumn, Winter or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Drawing of plans, elevations, and details of different types of buildings. Tracing and blue-printing. Prerequisites: Drawing 4, 5, and 6, or equivalent.

14. **Architectural Drawing.** Winter. Daily, 9:00 or 11:00. Two credit hours.

Continuation of 13.

15. **Architectural Drawing.** Spring. Daily, 9:00 or 11:00. Continuation of 14.

19. **Topographical Drawing.** Autumn or Spring. Daily, 9:00 or 11:00. Two credit hours. Snell.

Practical elementary work in topographical drawing, mapping and plotting from field notes.

- 26, 27, 28. **Architectural Design.** Autumn, Winter, Spring. Daily, 9:00 or 11:00. Extra laboratory period arranged any afternoon. Two or three credit hours each quarter. Snell.

A series of order problems involving the study of the principles of composition. Problems similar to Class B Analytiques of the Beaux-Arts Institute of Design will be followed. Prerequisites: Drawing 10, 11, 12, 14, 15.

Upper Division Courses

- 51, 52, 53. **Architectural Design.** Autumn, Winter, Spring. Daily, 9:00 or 11:00. Extra laboratory periods arranged any afternoon. Three credit hours each quarter. Snell.

Designing, rendering, detailing, tracing, and blue-printing. A complete set of plans with one display drawing each quarter. Prerequisites: Drawing 14 and 15.

ENGINEERING

Lower Division Courses

- 40, 41, 42. **Elementary Surveying.** Autumn, Winter, Spring.

M. W. F. Two credit hours each quarter. Snell. Time to be arranged. Prerequisites: Trigonometry and Drawing 5, 6, 7.

Methods of using the compass, tape, level, and transit in making plain surveys, differential leveling, profile, and cross-section work, curves, grades, computations, and platting.

Upper Division Course

63. **Geology of Ground Water.** Daily, 8:00. Five credit hours. (See Geology 92.)

Modern and Classical Languages

Professors Cummings, de Jong, Sperry, Swensen; Associate Professors Broadbent, Osmond; Assistant Professors Roberts, Lee; Mr. Valentine, Mr. Clark.

Every degree of Bachelor of Arts and Master of Arts granted by the University requires the completion of 24 hours of foreign language. This language requirement is the main distinguishing feature of these degrees.

The department offers in French, Spanish, Portuguese, German and Latin programs leading to a teaching minor and a teaching major; and in French, Spanish and German, graduate programs leading to a Master of Arts degree. Students specializing in this field are advised to offer two units of high school work in the chosen language. Graduate majors are advised to offer Latin.

If the department's recommendation for teaching is desired, courses above 50 totaling twenty hours including Linguistics 42 are required for a minor; courses above 50, totaling 30 hours, including Linguistics 42, are required for a major.

For a Master of Arts degree in French, Spanish, Portuguese, or German, 40 hours of undergraduate work in the language is prerequisite. The following requirements are made: 1. The passing of a qualifying examination in the language and literature to be studied as well as in the field of general culture. 2. The satisfactory completion of at least 24 hours of work in the chosen language. 3. A final written examination on this work. 4. The oral examination given under the direction of the Graduate School. 5. Courses covering the

general field of literature and elementary philology. 6. A satisfactory thesis either in the field of philology or of literature.

Romanic Languages

FRENCH

Lower Division Courses

- 1, 2, 3. First Year French.** Autumn, Winter, Spring. Daily, 9:00 1:00, 2:00. Five credit hours each quarter.

Designed for those who have had no French. Pronunciation, reading, the fundamentals of grammar, and the building of a substantial reading vocabulary.

Upper Division Courses

- 51, 52, 53. Second Year French.** Autumn, Winter, Spring. Daily, 1:00, 2:00. Five credit hours each quarter.

The various language skills, viz., reading, understanding, speaking and grammar. Reading, both intensive and extensive. Prerequisite: French 1, 2, 3, or two units of French in high school.

- 54, 55, 56. Second Year French.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours each quarter.

The various language skills, viz., reading, understanding, speaking, and grammar. Reading both intensive and extensive. Prerequisites: French 1, 2, 3, or two units of French in high school.

- 57, 58, 59. Individual Study in French.** Autumn, Winter, Spring. Hours to be arranged. One or two credit hours each quarter.

Assignments are made to fit the individual needs of students. Some work in this sequence may be required of French majors. Prerequisite: twenty-four hours of French and consent of the department head.

- 61, 62, 63. French Grammar and Composition.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours each quarter.

Review of grammar. Conversation and composition. Prerequisites: French 3, or two units of French in high school.

- 64, 65, 66. **French Composition and Conversation.** Autumn, Winter, Spring. M. W. F., 9:00. Three credit hours.

Prerequisite: Thirty hours of French or the consent of the instructor.

- 73, 74, 75. **Introduction to French Literature and Culture** Autumn. M. W. F., 10:00. Three credit hours each quarter.

A general view of the literary periods, movements, and social background, with representative readings. Prerequisites: Thirty hours of French or the consent of the instructor.

77. **Contemporary French Literature.** Spring. M. W. F., Three credit hours.

- 81, 82, 83. **Masterpieces of French Literature.** Autumn, Winter, Spring. M. W. F., 11:00. Three credit hours each quarter. Osmond.

Prerequisite: Twenty-four credit hours in French.

97. **French Seminar.** Autumn, Winter, or Spring. Hours to be arranged. Two credit hours. Staff.

Graduate Courses

151. **Introduction to French Classicism.** Winter. M. W. F., 3:00. Three credit hours. Osmond.

152. **Introduction to French Romanticism.** Spring. M. W. F., 2:00. Three credit hours. Roberts.

157. **French Novel from 1800 to the Present.** Spring. M. W. F., 9:00. Three credit hours. Osmond.

158. **French Drama from 1800 to the Present.** Spring. M. W. F., 2:00. Three credit hours. Cummings. (Not given this year.)

- 164, 165, 166. **French Composition and Conversation.** Autumn, Winter, Spring. M. W. F., 4:00. Three credit hours each quarter. Cummings.

171. **Old French Literature.** Spring: M. W. F., 3:00. Three credit hours. Roberts. (Not given this year.)

172. **French Literature of the Renaissance.** Winter. M. W. F., 3:00. Three credit hours. Osmond. (Not given this year.)

- 173, 175, 176. **French Literature of the Seventeenth, Nineteenth, and Twentieth Centuries.** Autumn, Winter, Spring. M. W. F., 4:00. Three credit hours each quarter. Roberts.
177. **Contemporary French Literature.** Spring. M. W. F. Three credit hours.
- 181, 182, 183. **Corneille, Racine, Moliere.** Autumn, Winter, Spring. T. Th., 3:00. Two credit hours each quarter. Roberts. (Not given this year.)
184. **Voltaire.** Winter. T. Th., 3:00. Two credit hours. Osmond. (Not given this year.)
185. **Rousseau.** Spring. T. Th., 3:00. Two credit hours. Osmond. (Not given this year.)
186. **Victor Hugo.** Spring. T. Th., 3:00. Two credit hours. Roberts. (Not given this year.)
187. **Flaubert and Maupassant.** Spring. T. Th., 9:00. Two credit hours. Osmond. (Not given this year.)
192. **Introduction to Romance Philology.** Autumn. M. W. F., 3:00. Three credit hours. Cummings. (Not given this year.)
- 193, 194, 195. **History of the French Language.** Autumn, Winter, Spring. M. W. F., 3:00. Three credit hours each quarter. Cummings.
- A survey of the development of French from its origins in Popular Latin. Introduction to Old French and to French Historical Grammar and Etymology. For graduate students only. Prerequisite to French 171.
196. **French Criticism.** Winter. T. Th., 10:00. Two credit hours. Cummings. (Not given this year.)
197. **French Seminar.** Autumn, Winter, or Spring. Hours to be arranged. Two credit hours. Staff.
200. **Research for Master's Thesis.**

SPANISH

Lower Division Courses

- 1, 2, 3. **First Year Spanish.** Autumn, Winter, Spring. Daily, 8:00, 9:00, 2:00. Five credit hours each quarter.

Designed for those who have not had Spanish. Pronunciation, reading, and the fundamentals of grammar. Special emphasis on the building of a substantial reading vocabulary.

Upper Division Courses

51, 52, 53. Second Year Spanish. Autumn, Winter, Spring. Daily, 9:00. Five credit hours each quarter. Valentine.

The various language skills, viz., reading understanding, speaking, grammar. Reading intensive and extensive. Prerequisites: Spanish 3, or two units of Spanish in high school.

54, 55, 56. Second Year Spanish. Autumn, Winter, Spring. M. W. F., 11:00. Three credit hours each quarter. Osmond.

The various language skills, viz., reading, understanding, speaking, grammar. Reading intensive and extensive. Prerequisites: Spanish 3, or fifteen hours of Spanish or two units of Spanish in high school.

57, 58, 59. Individual Study in Spanish. Autumn, Winter, Spring. Hours to be arranged. One or two credit hours each quarter.

Assignments are made to fit the individual needs of students. Some work in this sequence may be required of Spanish majors. Prerequisite: twenty-four hours of Spanish and the consent of the department head.

61, 62, 63. Spanish Grammar and Composition. Autumn, Winter, Spring. Daily, 2:00. Five credit hours. Valentine.

Review of grammar, composition and conversation. Prerequisites: Spanish 3, or two units in high school.

64, 65, 66. Spanish Composition and Conversation. Autumn, Daily, 2:00. Five credit hours. Cummings.

Prerequisite: Thirty hours of Spanish.

67, 68, 69. Spanish American Literature. Autumn, Winter, Spring. M. W. F., 3:00. Three credit hours each quarter. Valentine.

This sequence is an introduction to the study of the literature of Spanish America from its origins to the present, viewed in three grand divisions corresponding to the Colonial and Revolutionary period, the Romantic and Modernistic period, and the Contemporary period.

- 73, 74, 75. Introduction to Spanish Literature and Culture.** Autumn. M. W. F., 3:00. Three credit hours each quarter.

A general view of the literary periods, movements and social background, with representative readings. Prerequisite: thirty hours of Spanish or the consent of the instructor.

- 77. Contemporary Spanish Literature.** Spring. M. W. F. Three credit hours. Cummings.
- 97. Spanish Seminar.** Autumn, Winter, or Spring. Hours to be arranged. Two credit hours. Staff.

Graduate Courses

- 157. Spanish Novel 1800 to the Present.** Winter. M. W. F., 9:00. Three credit hours. Cummings.
- 158. Spanish Drama 1800 to the Present.** Spring. M. W. F., 9:00. Three credit hours. Cummings.
- 164, 165, 166. Spanish Composition and Conversation.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Valentine. (Not given this year.)
- 167, 168, 169. Spanish American Literature.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Valentine.

This sequence is an introduction to the study of the literature of Spanish America from its origins to the present, viewed in three grand divisions corresponding to the Colonial and Revolutionary period, the Romantic and Modernistic period, and the Contemporary period.

- 173, 174, 175, 176. Spanish Literature of the Seventeenth, Eighteenth, Nineteenth, and Twentieth Centuries.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Valentine. (Not given this year.)

PORTUGUESE

Lower Division Courses

- 1, 2, 3. First Year Portuguese.** Autumn, Winter, Spring. Daily, 9:00. Five credit hours each quarter. de Jong.

A beginning course. Pronunciation, reading, and the

fundamentals of grammar. Special attention to Portuguese as the language of Brazil.

Upper Division Courses

- 51, 52, 53. **Second Year Portuguese.** Autumn, Winter, Spring. Daily, 2:00. Five credit hours each quarter. de Jong.

The various language skills, viz., reading, understanding, speaking, grammar. Reading intensive and extensive. Prerequisites: Portuguese 3 or the equivalent.

- 64, 65, 66. **Portuguese Composition and Conversation.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. de Jong. Prerequisite: Twenty-four credit hours in Portuguese.

- 81, 82 83. **Masterpieces of Portuguese Literature.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. de Jong. Prerequisite: Twenty-four credit hours in Portuguese.

ITALIAN

Lower Division Courses

- 1, 2, 3. **First Year Italian.** Autumn, Winter, Spring. Daily, 1:00. Five credit hours each quarter. Cummings.

Special attention to accurate pronunciation for the benefit of students of music and art for whom Italian has special interest and value. Grammar and easy reading carefully graded.

Upper Division Courses

- 54, 55, 56. **Second Year Italian Reading.** Autumn, Winter, Spring. M. W. F., 3:00. Three credit hours each quarter. Cummings. (Not given this year.)
Four credit hours each quarter.

Reading intensive and extensive. Prerequisite: Italian 3.

- 57, 58, 59. **Individual Study in Italian.** Autumn, Winter, Spring. Hours to be arranged. One or two credit hours each quarter. Cummings.

- 81, 82, 83. **Masterpieces of Italian Literature.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Cummings. Prerequisite: Twenty-four credit hours in Italian.

Germanic Languages

GERMAN

Lower Division Courses

- 1, 2, 3. First Year German.** Autumn, Winter, Spring. Daily. Sec. 1, 8:00, de Jong. Sec. 2, 1:00. Osmond. Five credit hours each quarter.

Designed for those who have had no German. Pronunciation, reading, and the fundamentals of grammar, the building of a substantial reading vocabulary.

Upper Division Courses

- 51, 52, 53. Second Year German.** Autumn, Winter, Spring. Daily, 9:00. Five credit hours each quarter. de Jong.

The various language skills, viz., reading, understanding, speaking, and grammar. Reading, both intensive and extensive. Prerequisites: German 1, 2, 3, or two units of German in high school.

- 54, 55, 56. Second Year German.** Autumn, Winter, Spring. M. W. F., 3:00. Three credit hours each quarter.

The various language skills, namely, reading, understanding, speaking, grammar. Reading intensive and extensive. Prerequisites: German 3, or two units of high school German.

- 57, 58, 59. Individual Study in German.** Autumn, Winter, Spring. Hours to be arranged. One or two credit hours each quarter.

Assignments are made to fit the individual needs of students. Some work in this sequence may be required of German majors. Prerequisite: twenty-four hours of German and consent of the department head.

- 61, 62, 63. Third Year German Grammar and Composition.** Autumn, Winter, Spring. T. Th., 3:00. Five credit hours each quarter. de Jong. Prerequisite: twenty-four hours of German or the consent of the instructor.

- 64, 65, 66. German Composition and Conversation.** Autumn, Winter, Spring. M. W. F. Three credit hours.

Prerequisite: thirty hours of German or the consent of the instructor.

- 67, 68, 69. **Scientific German.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Broadbent.
- 73, 74, 75. **Introduction to German Literature and Culture.** Autumn, Winter, Spring. Daily, 2:00. Five credit hours each quarter. de Jong.
- A general view of the literary periods, movements, and social background, with representative readings. Prerequisite: thirty hours of German or the consent of the instructor.
77. **Contemporary German Literature.** Spring. M. W. F. Three credit hours. de Jong.
97. **German Seminar.** Autumn, Winter, or Spring. Hours to be arranged. Two credit hours. Staff.

Graduate Courses

157. **German Drama from 1800 to the Present.** Three credit hours. de Jong. (Not given this year.)
158. **German Novel, 1800 to the Present.** Three credit hours. de Jong. (Not given this year.)
- 164, 165, 166. **German Composition and Conversation.** Autumn, Winter, Spring. M. W. F., 4:00. Three credit hours each quarter. de Jong.
- 173, 174, 175. **History of German Literature.** Autumn, Winter, Spring. Daily, 2:00. Three credit hours. de Jong.
181. **Lessing.** Autumn. M. W. F. Three credit hours. de Jong.
182. **Schiller.** Winter. M. W. F. Three credit hours. de Jong.
183. **Goethe.** Spring. M. W. F. Three credit hours. de Jong.
184. **Kleist and Grillparzer.** Autumn. M. W., 9:00. Two credit hours. Broadbent.
185. **Hebbel and Ludwig.** Winter. M. W., 9:00. Two credit hours. Broadbent.
186. **Hauptmann and Sudermann.** Spring. M. W., 9:00. Two hours. Broadbent.
192. **Gothic.** Autumn. M. T. W. Th., 4:00. Four credit hours. de Jong.

Introduction to the study of Gothic. General introduc-

tion to Germanic Philology. Reading from the Gothic Bible.

193. Old High German. Winter. M. T. W. Th., 4:00. Four credit hours. de Jong.

194. Middle High German. Spring. M. T. W. Th., 4:00. Four credit hours. de Jong.

Reading of selected Middle High German texts.

197. German Seminar. Autumn, Winter, or Spring. Hours to be arranged. Two credit hours. Staff.

200. Research for Master's Thesis.

Classics

LATIN

Lower Division Courses

1, 2, 3. First Year Latin. Autumn, Winter, Spring. Daily, 2:00. Five credit hours each quarter. Clark.

Designed for those who have had no Latin. Mastery of pronunciation, declensions and conjugations. Correlation of Latin originals with English derivatives. Graded reading. Characteristics of Roman civilization.

41, 42. Pre-Medical Latin and Greek. Winter and Spring. M. W. F., 10:00. Two or three credit hours each quarter. Clark.

Recommended for pre-medical students. Admission by permission of the instructor.

Upper Division Courses

54, 55, 56. Advanced Latin. Autumn, Winter, Spring. M. W. F., 2:00. Three credit hours each quarter. Lee. (Not given this year.)

A comprehensive study of grammar, composition. A continuation of the study of the influence of Latin on English. Readings from the classics. Prerequisites: Latin 3, or two years of high school Latin.

GREEK

Upper Division Courses

- 51, 52, 53. Elementary Greek. Autumn, Winter, Spring. M. W. F. Time to be arranged. Three credit hours each quarter. Swensen.

Drill in fundamentals of grammar. Development of vocabulary with correlations with English derivatives. Graded readings from the Greek New Testament.

- 54, 55, 56. Second Year Greek. Autumn, Winter, Spring. M. W. F. Time to be arranged. Three credit hours each quarter. Swensen.

Drills in the fundamentals of classical Greek syntax and grammar. Readings from Xenophon and the discourse materials of the Greek New Testament. Prerequisite: Greek 51, 52, 53.

- 57, 58, 59. Elementary Modern Greek. Autumn, Winter, Spring. M. W. F., 8:00. Three credit hours each quarter. Swensen.

A study of Greek as a living language. Pronunciation, elementary grammar, and graded readings. Special attention to English derivatives.

- 60, 61, 62. Second Year Modern Greek. Autumn, Winter, Spring. Time to be arranged. Three credit hours each quarter. Swensen.

Advanced grammar and reading in the various types of Modern Greek Literature. Prerequisite: Greek 57, 58, 59.

Semitics

The following courses in Biblical languages are offered. They carry religious credit and fulfill the language requirement for the A. B. degree:

HEBREW

- 51, 52, 53. Elementary Hebrew. Autumn, Winter, Spring. Daily, 1:00. Five credit hours each quarter. Sperry.

The elements of Hebrew grammar are thoroughly treat-

ed. Several elementary Hebrew books are read, followed by intensive drill in the Old Testament.

- 54, 55, 56. Intermediate Hebrew.** Autumn, Winter, Spring. M. W. F., 11:00. Three credit hours each quarter. Sperry.

This course consists of advanced grammar and readings from Genesis, Deuteronomy, Samuel, Kings, and certain of the Minor Prophets.

- 64, 65, 66. Advanced Hebrew.** Autumn, Winter, Spring. T. Th. Time to be arranged. Two credit hours each quarter. Sperry.

This course consists of Hebrew syntax and selected readings from the Prophets and the Hebrew Wisdom Literature.

ARAMAIC

- 61, 62, 63. Biblical Aramaic and the Targums.** Autumn, Winter, Spring. T. Th., 8:00. Two credit hours each quarter. Sperry. Prerequisites: Hebrew 51, 52, 53.

SYRIAC

- 51, 52, 53. Elementary Syriac.** Autumn, Winter, Spring. T. Th., 2:00. Two credit hours each quarter. Sperry.

Elements of the grammar and reading from the Syriac New Testament. Prerequisites: Hebrew 51, 52, 53.

- 54, 55, 56. Intermediate Syriac.** Autumn, Winter, Spring. Th., 8:00. One credit hour each quarter. Sperry.

Advanced grammar and reading from the Syriac Old and New Testaments and other literature.

AKKADIAN

- 51, 52, 53. Elementary Akkadian.** Autumn, Winter, Spring. M. F., 2:00. Two credit hours each quarter. Sperry.

In this course the student masters most of the ordinary signs and acquires a good knowledge of the grammar. At least two years of Hebrew are prerequisite to this course or consent of instructor.

Slavic

RUSSIAN

Lower Division Courses

- 1, 2, 3. **First year Russian.** Autumn, Winter, Spring. Daily, 3:00. Five credit hours each quarter. Cummings.

Designed for those who have had no Russian. Pronunciation, reading and the fundamentals of grammar, and the building of a substantial reading vocabulary.

Upper Division Courses

- 54, 55, 56. **Second Year Russian.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Cummings.

The various language skills, viz., reading, understanding, speaking and grammar. Reading, both intensive and extensive. Prerequisites: Russian 1, 2, 3 or the equivalent.

- 57, 58, 59. **Individual Study in Russian.** Autumn, Winter, Spring. Hours to be arranged. One or two credit hours each quarter. Cummings.

Assignments are made to fit the individual needs of students. Prerequisites: certain elementary work in Russian and the consent of the instructor.

Linguistics

Lower Division Courses

1. **Meanings in Language.** Autumn. M. W. F., 11:00. Three credit hours. Cummings.

This course affords practice in the building of English vocabulary through the application of principles of linguistics, especially as they relate to meanings. It involves word study including derivations, word-formation, synonyms, antonyms, changes in meaning, etc. In addition the course is concerned with the critical problem of meaning, that is, the meaning of meaning. The design is to present a picture of the nature, the function and the resources of language. Open to all students, and of interest

to all who would expand and improve their language resources for reading, writing and speaking.

- 42. Practical Phonetics.** Winter. M. W. F. 11:00. Three credit hours. Cummings.

The elementary principles of speech mechanics in their relation to correct diction. This course correlates with courses in the Modern Languages, Speech, and Vocal Music. Should precede Linguistics 91.

Upper Division Courses

- 51. Interpretation.** Spring. M. W. F., 11:00. Three credit hours. Cummings.

Literary and general criticism through the application of the principles of linguistics to word-study and text-interpretation. For students of English or foreign literature.

- 91. Introduction to Linguistics.** Spring. M. W. F., 1:00. Three credit hours. Cummings.

An introduction to the science of language. An account of the nature of language, symbolism, meanings and the principles of language development. Intended for teachers of English and foreign languages and for those seeking general culture in a better appreciation of the anthropological and sociological fact of language. The approach is best made with some knowledge of one or more foreign languages and elementary phonetics.

- 99. Theory of Interpretation.** Autumn. T. Th., 1:00. Two credit hours. Cummings.

Application of the principles of linguistics to the study of word-meanings and to problems of text-interpretation. Intended for students of language and literature.

Graduate Courses

- 191. Introduction to Linguistics.** Spring. M. W. F., 1:00. Three credit hours. Cummings.

An introduction to the Science of Language.

- 199. Theory of Interpretation.** Autumn. T. Th., 1:00. Two credit hours. Cummings.

Music

Professors Jepperson-Madsen, Robertson, Madsen, De Jong, Cummings; Associate Professor Halliday; Assistant Professor Hanson; Miss Summerhays, Mr. Buggert, Mr. Keeler, Mr. Booth, Mr. McAllister, Mr. Nelson, Mr. Fitzroy, Mrs. Packard.

Those who major in the Department of Music must complete the following courses: Theory of Music 11, 12, 13; 21, 22, 23; 61; 71, 72, 73; 81, 82; 84, 85; Piano, 3 hours; Vocal Culture, 3 hours; and Vocal or Instrumental Ensemble, 6 hours. Those preparing to teach should also take Theory of Music 90 and 91. These requirements are subject to change where conditions warrant individual consideration.

The work presented by those who minor in the Department of Music should include the following courses: Theory of Music 11, 12, 13; 21, 22, 23; 31; 90 and 91; and some ensemble.

Private courses are indicated by "p."

THEORY OF MUSIC

Lower Division Courses

1. **Fundamentals of Music.** Autumn, Winter, or Spring. Three credit hours. Keeler.

An introductory course in music fundamentals, especially designed for those who have not had sufficient practical experience in music to meet the prerequisites of other theory of music courses.

- 11, 12, 13. **Solfeggio.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Summerhays.

The study of notation, intervals, diction, and sight-singing.

- 21, 22, 23. **Harmony.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Booth.

Intervals; primary and secondary triads; dominant seventh and ninth chords, diminished seventh chords.

- 24, 25, 26. **Harmony.** Autumn, Winter, Spring. Daily. Five credit hours each quarter. Halliday.

This course combines the materials of Theory of Music 11 and 21, and is designed especially for music majors and those minors who have had the requisite preparation.

- 31, 32, 33. Appreciation of Music.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Madsen.

A non-technical course in music appreciation, especially designed for those who do not major in music.

- 41, 42, 43. Conducting.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Madsen.

The principles of instrumental and vocal conducting. Baton technique.

Upper Division Courses

- 61, 62, 63. Solfeggio.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Summerhays.

Training in advanced sight-singing. Prerequisite: Theory of Music 13.

- 71, 72, 73. Harmony.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Robertson.

Modulation; secondary seventh and altered chords; non-harmonic tones; form and analysis. Prerequisite: Theory of Music 23, and the equivalent of 3 hours of piano.

- 74, 75, 76. Keyboard Harmony.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Keeler.

Harmonization of figured and unfigured bass and of other voices; cadences, sequences, transpositions, modulations, and elementary improvisations at the keyboard. Prerequisite: Theory of Music 23.

- 81, 82, 83. History.** Autumn, Winter, Spring. M. W. F. Three credit hours each quarter. Halliday.

Alien musical systems, ancient and modern. Medieval and modern music.

- 84, 85, 86. Philosophy and Appreciation of Music.** Autumn, Winter, Spring. M. W. Two credit hours each quarter. Madsen.

A technical course principally for music majors. The philosophies of music and musicians, the elements of music, musical structure, composition, and values.

- 87, 88, 89. Directing.** Autumn, Winter, Spring. T. Th. Two credit hours each quarter. Madsen.

The principles of vocal and instrumental directing applied. A course designed for music majors. Prerequisites: Theory of Music 73.

- 90. Public School Methods.** Autumn, Winter, or Spring. M. W. F. Three credit hours. McAllister.

Special technique of instruction and materials for the grades; class demonstrations and supervised teaching. Prerequisites: Theory of Music 1, or 11, or the equivalent.

- 91. High School Methods.** Autumn, Winter, or Spring. T. Th. Two credit hours. Hanson.

Special technique of instruction and materials for the junior and senior high schools. This course should precede Secondary Education 84.

- 92, 93. Counterpoint.** Autumn, Winter. T. Th. Two credit hours each quarter. Madsen.

An elementary course in counterpoint.

- 94. Composition.** Spring. T. Th. Two credit hours. Madsen.

An elementary course in composition in the smaller forms. Prerequisites: Theory of Music 73, 93.

- 95. Instrumentation.** Winter. T. Th. Two credit hours. Halliday.

A practical course for high school teachers and supervisors in arranging for band and orchestra.

- 96, 97, 98. Orchestra and Band Instruments.** Autumn, Winter, Spring. One or two credits each quarter. Buggert, Booth.

For music majors in their junior or senior years. Practical experience with string, woodwind, and brass instruments for prospective high school music teachers.

Graduate Courses

- 111, 112, 113. Counterpoint.** Autumn, Winter, Spring. Three credit hours each quarter. Halliday.

Modal counterpoint. Prerequisite: Theory of Music 73.

- 114, 115, 116. Counterpoint and Canon.** Autumn, Winter, Spring. Three credit hours each quarter. Robertson.

Strict and free counterpoint. Double counterpoint. Imi-

tation. The older forms, such as the motett, mass, madrigal. Prerequisite: Theory of Music 113.

- 121, 122, 123. Harmony.** Autumn, Winter, Spring. Three credit hours each quarter. Halliday.

Intensive study of mixed chords and dissonance. Modern harmony. Building of advanced technique. Prerequisite: Theory of Music 113.

- 131, 132, 133. Instrumentation.** Autumn, Winter, Spring. Three credit hours each quarter. Robertson.

Arranging for chamber combinations, string and symphony orchestra. Prerequisite: Theory of Music 73.

- 161, 162, 163. Fugue.** Autumn, Winter, Spring. Three credit hours each quarter. Robertson.

Analysis of fugues, such as those found in the Well-tempered Clavichord. Construction of fugue subjects and fugues. Prerequisites: Theory of Music 116 and 123.

- 171, 172, 173. Composition.** Autumn, Winter, Spring. Three credit hours each quarter. Robertson.

Prerequisites: Theory of Music 116 and 123.

- 181, 182, 183. Directing.** Autumn, Winter, Spring. Two credit hours each quarter. Madsen.

An advanced course in vocal and instrumental directing. Prerequisite: Theory of Music 73.

- 200. Research for Master's Thesis.** Credit to be arranged.

INSTRUMENTAL MUSIC

Lower Division Courses

- 1, 2, 3, 4, 5, 6. Band.** Autumn. Winter. Spring. Daily. One credit hour each quarter. Halliday.

Admission by consent of director.

- 7, 8, 9, 10, 11, 12. Orchestra.** Autumn, Winter, Spring. Daily. One credit hour each quarter. Robertson.

Admission by consent of director.

- 13, 14, 15, 16, 17, 18. String Ensemble.** Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Buggert.

19, 20, 21, 22, 23, 24. **Band Ensemble.** Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Halliday.

25, 26, 27, 28, 29, 30. **Woodwind Ensemble.** Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Booth.

31, 32, 33, 34, 35, 36. -p. **Private Instruction on Standard Instruments.** Autumn, Winter, Spring. One credit hour each quarter.

Strings: Violin, Viola, Violoncello, Bass. Robertson, Buggert.

Woodwinds: Flute, Oboe, Clarinet, Bassoon, Saxophone. Halliday, Booth, Nelson, Buggert.

Brass: Trumpet, Cornet, French Horn, Trombone, Baritone, Tuba. Buggert, Halliday.

Percussion: Drums and Timpani.

Piano: Nelson, Hanson, Fitzroy, Keeler.

Organ: De Jong, Keeler.

37, 38, 39. -p. **Piano Ensemble.** Autumn, Winter, Spring. One credit hour each quarter. Nelson.

The playing of four-hand, six-hand, and eight-hand arrangements.

40. -p. **Piano Pedagogy.** Autumn, Winter, or Spring. One credit hour each quarter. Nelson, Hanson, Fitzroy.

Methods and problems in piano teaching in the elementary grades.

41. **Group Piano Instruction.** Autumn, Winter, or Spring. T. Th. 1:00 or 2:00. One credit hour. Laboratory fee, \$3.00. Hanson.

Class instruction for beginners in keyboard technique and fundamentals of music.

Upper Division Courses

51, 52, 53,; 54, 55, 56. **Concert Band.** Autumn, Winter, Spring. Daily. One credit hour each quarter. Halliday.

Admission by consent of director.

57, 58, 59; 60, 61, 62. **Symphony Orchestra.** Autumn, Winter,

Spring. Daily. One credit hour each quarter. Robertson.

Admission by consent of director.

63, 64, 65; 66, 67, 68. String Ensemble. Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Buggert.

69, 70, 71; 72, 73, 74. Band Ensemble. Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Halliday.

75, 76, 77; 78, 79, 80. Woodwind Ensemble. Autumn, Winter, Spring. Three times each week. One credit hour each quarter. Booth.

81, 82, 83; 84, 85, 86. -p. Private Instruction on Standard Instruments. Autumn, Winter, Spring. One credit hour each quarter.

Strings: Violin, Viola, Violoncello, Bass. Robertson, Buggert.

Woodwinds: Flute, Oboe, Clarinet, Bassoon, Saxophone.

Halliday, Booth, Nelson, Buggert.

Brass: Trumpet, Cornet, French Horn, Baritone, Trombone, Tuba. Halliday, Buggert.

Percussion: Drums and Timpani.

Piano: Nelson, Hanson, Fitzroy, Keeler.

Organ: De Jong, Keeler.

90. -p. Piano Pedagogy. Spring. One credit hour. Nelson.

Methods and problems of piano teaching in the higher grades. Prerequisite: 40 -p.

Graduate Courses

131, 132, 133. -p. Instrumental. Autumn, Winter, Spring. One credit hour each quarter. Staff.

Advanced instruction on any of the standard instruments.

VOCAL MUSIC**Lower Division Courses**

- 1, 2, 3; 4, 5, 6. Ladies' Glee Club.** Autumn, Winter, Spring. One credit hour each quarter. Jepperson-Madsen.

Open to inexperienced singers. This course also provides participation in Mixed Chorus.

- 1, 2, 3; 4, 5, 6. Male Glee Club.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

Open to inexperienced singers. This course also provides participation in Mixed Chorus.

- 7, 8, 9; 10, 11, 12. Concert and Opera Chorus.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

Admission by consent of director.

- 13, 14, 15; 16, 17, 18. A Capella Chorus.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

- 31, 32, 33; 34, 35, 36. -p. Private Instruction In Voice.** Autumn, Winter, Spring. One credit hour each quarter. Jepperson-Madsen, Madsen, Halliday, Summerhays, Packard, McAlister.

- 42. Phonetics.** Autumn or Winter. Three credit hours. Cummings. (See Linguistics 42 in Department of Modern and Classical Languages.)

Upper Division Courses

- 51, 52, 53; 54, 55, 56. Ladies' Glee Club.** Autumn, Winter, Spring. One credit hour each quarter. Jepperson-Madsen.

Admission is by consent of director. Participation in Mixed Chorus is also provided.

- 51, 52, 53; 54, 55, 56. Male Glee Club.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

Admission by consent of director. Participation in Mixed Chorus is also provided.

- 57, 58, 59; 60, 61, 62. Concert and Opera Chorus.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

Admission by consent of director.

- 63, 64, 65; 66, 67, 68. A Capella Chorus.** Autumn, Winter, Spring. One credit hour each quarter. Madsen.

81, 82, 83, 84, 85, 86, -p. **Private Instruction In Voice.** Autumn, Winter, Spring. One credit hour each quarter. Jepperson-Madsen, Madsen, Halliday, Summerhays, Packard.

Graduate Courses

131, 132, 133. **Vocal Culture.** Autumn, Winter, Spring. One credit hour each quarter. Jepperson-Madsen, Madsen, Halliday, Summerhays, Packard, McAllister.

Advanced instruction in vocal culture.

Physics

Professors Eyring, Marshall, and Hales.

Students who expect to study Medicine, Engineering, Chemistry, or who are planning to major or minor in the Department of Physics, should begin their study of Physics by electing courses 41, 42 and 43.

Non-science students may elect with profit courses, 1, 2, 16, 21, and 26, which may be taken without prerequisite and which are organized with the view of giving the student an appreciation of his physical environment.

Students majoring in Physics have the following courses prescribed: Physics 41, 42, 43, 90, 91, 92, and 22 hours selected from the upper division courses in the Physics Department.

Students majoring in Physics and expecting to be high school teachers have the following courses prescribed: Physics 41, 42, 43, and any courses totaling 15 hours of upper division credit in the Physics Department.

Physics is one of the subjects comprising the composite major in Mathematics and the Physical Sciences designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

1. **A Survey Course in Physics.** Autumn. M. W. F., 10:00.

Three credit hours. Eyring.

This is an elementary course designed for non-science students who wish to obtain training in the scientific aspects of force and motion, energy and work, simple machines, heat as it pertains to the household, and electricity. This course will be of special interest to students of Physical Education and Home Economics. Courses 1 and 2 should be elected by the non-science student if he wishes an orientation in the whole field of Physics.

2. **A Survey Course in Physics.** Winter. M. W. F., 10:00. Three credit hours. Eyring.

This is an elementary course designed for non-science students who wish to obtain training in the science of sound as it pertains to speech, music, and auditorium acoustics; and for the students who wish to obtain training in the scientific aspects of light and color. This course and course 1 will give to the non-science student an orientation in the field of Physics.

16. **Descriptive Astronomy.** Spring. M. W. F., 10:00. Three credit hours. Eyring.

This course is designed for those wishing a general knowledge of the facts, theories, and methods of astronomy. Frequent use will be made of the University Observatory on University Hill.

21. **Meteorology.** Autumn. Lecture, M. W. F., 11:00. Laboratory, T. and Th. Time to be arranged. Five credit hours. Hales.

A study of the earth's atmosphere and the problems associated with weather forecasting.

26. **Photography.** Spring. Lecture, M. W. F., 11:00. Laboratory, time to be arranged. Four credit hours. Hales. (See Journalism. 26.)

Lectures on the theory and art of photography; laboratory exercises in photographic manipulation, determination of the characteristics of photographic materials, color, sensitivity, etc.

41. **General Physics. Mechanics and Sound.** Autumn. Lecture, M. W. F., 1:00. Laboratory, T. and Th., 1:00-3:00. Five credit hours. Hales or Marshall.

Courses 41, 42 and 43, constitute a general college course in Physics. This general course will satisfy the requirements in Physics for engineering and medical stu-

dents, and it is a prerequisite for all the specialized courses in physics.

42. **Electricity.** Spring. Lecture, M. W. F., 1:00. Laboratory, T. and Th., 1:00-3:00. Five credit hours. Hales or Marshall.

Continuation of 41.

43. **Heat and Light.** Winter. Lecture, M. W. F., 1:00. Laboratory, 1:00-3:00. Five credit hours. Hales or Marshall.

Continuation of 42.

Upper Division Courses

55. **Atomic Physics.** Autumn. M. T. Th. F. Laboratory W. 9:00. Five credit hours. Hales.

A study of the structure of the atom as revealed by α -rays, radio activity, spectroscopy, and related subjects.

- 66, 67. **Electricity and Magnetism.** Winter, Spring. Lecture, T. Th. F. Laboratory, M. W. Five credit hours each quarter. Marshall.

A study of electronics, the vacuum tube, and D. C. and A. C. circuit theory and measurements.

71. **Physics of the Air.** Winter. Lecture, M. W. F., 10:00. Laboratory T. Th. Five credit hours. Hales.

The physics of the earth's atmosphere; a study of the causes which produce variations in the pressure, temperature and humidity of the air and their influence upon weather and climate.

72. **Synoptic Meteorology.** Spring. Lecture, M. W. F., 10:00. Laboratory, T. Th. Five credit hours. Hales.

A continuation of course 71, with special emphasis placed upon the Norwegian Polar Front theory of weather analysis. Daily weather maps, including all frontal data, atmospheric cross sections, and various thermodynamic charts, will be constructed as part of the laboratory work.

73. **Introduction to Aerodynamics.** Spring. Daily, 10:00. Five credit hours. Marshall

Elementary dynamics of particles, fluids, and solid bodies, with application to aeronautics.

74. **Sound.** Spring. Lecture, M. T. Th. F., 8:00. Laboratory, W. Five credit hours. Eyring.

Speech, hearing, sound transmission, and radiation, and acoustics of auditoriums.

- 75. Experimental Optics.** Spring. Lecture, M. W. F., 2:00. Laboratory, time to be arranged. Five credit hours. Marshall.

During the first part of the course experiments outlined in Taylor's Manual of Optics will be performed and during the last special work in the echelon and concave grating will be given.

- 76. Advanced Photography.** Winter. Lecture, T., 3:00. Laboratory, time to be arranged. Two credit hours. Hales.

A laboratory course in the more advanced photographic principles including sensitometry, physical development, toning, natural color printing, and so forth. Prerequisites: Physics 26 and Physics 41, 42, 43, or Chemistry 4, 5, 6.

- 81. Mechanics.** Winter. Daily, 8:00. Five credit hours. Eyring.

Fundamental principles of mechanics and their application to physical problems. Prerequisites: Calculus and Physics 41, 42, 43.

- 83. Thermodynamics.** Spring. Daily, 8:00. Five credit hours. Eyring.

A study of the laws of thermodynamics and their application to numerous physical and chemical phenomena.

- 85. Advanced Physical Measurements.** Autumn, Winter, or Spring. Time to be arranged. One to three credit hours. Eyring, Marshall, and Hales.

Precision measurements involving special laboratory techniques and the solution of some simple research problem. Required of all majors in Physics in senior year.

- 87. Laboratory Arts.** Autumn. T. Th., 3:00-6:00. Two credit hours. Marshall and Hales. (Not given this year.)

Processes connected with the construction and use of apparatus in physical laboratory.

- 90, 91, 92. Seminar.** Autumn, Winter, Spring. One credit hour each quarter. Time to be arranged. Eyring, Marshall and Hales.

A survey of the physical theories and topics in modern research. A course for seniors in which the student is

aided to integrate the specialized courses.

- 95. Readings in Modern Physics.** Credit, one to three hours, depending on the work done. Eyring, Marshall, and Hales.

A reading course designed to acquaint the student with new material, which may not have been included in the regular courses.

Graduate Courses

- 101, 102. Introduction to Modern Physics.** Autumn, Winter. Daily, 8:00. Five credit hours each quarter. Marshall. (Not given this year.)

A study of modern physics, including such topics as quantum theory, spectroscopy, and atomic structure, etc.

- 103. Quantum Mechanics.** Spring. Daily, 8:00. Five credit hours. Marshall. (Not given this year.)

- 105, 106, 107. Introduction to Theoretical Physics.** Autumn, Winter, Spring. Daily, 11:00. Five credit hours each quarter. Hales. (Not given this year.)

An introductory study of the mathematical basis and development of the fundamental laws and theories of physics.

- 110, 111, 112. Classical Experiments.** Each course, two credit hours. Eyring, Marshall, and Hales.

- 190, 191, 192. Seminar.** Autumn, Winter, Spring. Time to be arranged. One credit hour each quarter. Marshall and Hales.

- 195. Readings in Modern Physics.** Credit, one to three hours, depending upon amount of work done. Eyring, Marshall and Hales.

- 200. Thesis in Physics.** Credit to be arranged.

Aeronautical Science

Lower Division Courses

- 22. Navigation.** Winter. Lecture, M. W. F., 11:00. Laboratory T. and Th. Time to be arranged. Five credit hours. Hales.

Problems associated with dead reckoning, radio, and celestial navigation will be emphasized.

- 35. Civil Pilot Training and Air Regulations.** Autumn or Spring. No credit. Hales.

This course includes the elementary theory of flight, general service to aircraft engines, and civil air regulations as required for C. A. A. private pilot certificates.

- 36. Meteorology and Navigation.** Autumn or Spring. Daily. Five credit hours. Hales.

The problems in weather and navigation met by the pilot will be studied. The course includes all theory required for C. A. A. examination for private pilot certificates.

- 37. Aerodynamics and Airplane Structures.** Autumn and Spring. Daily. Four credit hours. Hales.

This course includes the elementary theory of Aerodynamics as required for secondary C. P. T. A number of wind tunnel experiments will be performed by the student.

- 38. Airplane Engines.** Autumn and Spring. Daily. Four credit hours. Hales.

A study of types of aircraft engines and the theory back of their operation, including timing, ignition, carburetion, supercharger, etc.

- 39. Flight Training.** Autumn, Winter, Spring. Time to be arranged. One to three credit hours.

Arrangement will be made by the student to take this flight training under the direction of the Provo Flight Service. Credit will be given according to the hours actually completed in the air and the C. A. A. pilot's certificates achieved.

Upper Division Courses

Physics 41, 42 and 43, and Mathematics 50, 51 and 52 are prerequisites for the following courses.

- 71. Physics of the Air.** Winter. Lecture, M. W. F., 10:00. Laboratory T. Th. Five credit hours Hales

The physics of the earth's atmosphere; a study of the causes which produce variations in the pressure, temperature, and humidity of the air and their influence upon weather and climate.

- 72. Synoptic Meteorology.** Spring. Lecture, M. W. F., 10:00. Laboratory, T. Th. Five credit hours. Hales.

A continuation of course 71, with special emphasis placed upon the Norwegian Polar Front theory of weather analysis. Daily weather maps, including all frontal data, atmospheric cross sections, and various thermodynamic charts, will be constructed as part of the laboratory work.

- 73. Introduction to Aerodynamics.** Spring. Daily, 10:00. Five credit hours. Marshall.

Elementary dynamics of particles, fluids, and solid bodies, with application to aeronautics.

Political Science

Professor Jensen; Mr. J. R. Clark III.

Requirements for a Major in Political Science

A Political Science Major requires the completion of 45 hours of work in this field. Political Science 5, 10, 11, and 15, are required courses and should be completed by the end of the sophomore year. The additional work shall consist of upper division courses which will be selected by the student with the consent of the major professor.

A student deciding to major in Political Science must immediately consult the head of the department who will determine in consultation with the student upon the minor field of work.

Lower Division Courses

- 5. Principles of Political Science.** Autumn. Daily, 9:00. Five credit hours. Jensen.

A comparative study of the origin and development of government, its forms and organizations, problems of administration and popular control, international relations, and world politics.

10. **National Government of the United States...** Winter. Daily, 9:00. Five credit hours. Jensen.

The historical development of the American Government; origin and growth of the Constitution; constitutional rights of the citizen; a detailed study of the executive, legislative, and judicial departments of the national government.

11. **State and Local Government in the United States.** Spring. Daily, 9:00. Five credit hours. Jensen.

The nature of federal government; the evolution of states from territories; place of the states in the nation; a study of the executive, legislative and judicial branches of state government.

15. **Political Parties and Party Government.** Autumn. Daily, 8:00. Five credit hours. (Not given this year.)

A study of the organization and methods of action of political systems in the United States; the development of the party system; the party system in leading European countries.

Upper Division Courses

51. **European Political Philosophy.** Winter. Daily, 8:00. Five credit hours. (Not given this year.)

A study of political theory as developed during ancient, medieval, and modern times.

53. **History of American Political Thought.** Spring. M. W. F., 11:00. Three credit hours. Jensen. (Not given this year.)

A study and interpretation of American political ideas from the colonial period to the present with an examination of their influence in the development of American history and government.

57. **Commercial Law.** Autumn. M. T. W. Th., 8:00. Four credit hours. (See Finance and Banking 57.) J. R. Clark III.

Fundamental legal principles and institutions; the for-

mation, operation and effect, and performance of contracts.

58. **Commercial Law.** Winter. M. T. W. Th., 8:00. Four credit hours. (See Finance and Banking 58.) J. R. Clark III.

A study of law governing negotiable instruments, rights and liabilities of parties thereto; also a study of the law governing sales of personal property as distinguished from gifts, barter, and bailments.

59. **Commercial Law.** Spring. M. T. W. Th., 8:00. Four credit hours. (See Finance and Banking 59.) J. R. Clark III.

A study of the law governing relationships arising out of business associations; Agency, Partnerships, and Corporations will be studied by an examination of the leading cases decided by the courts.

63. **Municipal Government.** Spring. M. W. F., 2:00. Three credit hours. (Not given this year.)

A study of municipal growth and development in the United States and in some of the principal European countries. Attention is given to municipal structure, organization, and administration.

67. **Public Administration.** Autumn. M. W. F., 2:00. Three credit hours. (Not given this year.)

An examination of the field of public administration, emphasizing the relationship of the administration to other branches of government, the organization and personnel of administrative services, types of control of the administration, central and local administration, etc.

73. **Comparative European Government.** Spring. M. W. F., 11:00. Three credit hours. Jensen.

A study of the organization and operation of the governments of England, France, Italy, Germany, and Russia. Attention is also given to some of the new European governments.

80. **International Law.** Winter. M. W. F., 1:00. Three credit hours. J. R. Clark, III.

A study of the sources, principles, and sanctions of international law; the law of peace, war, and neutrality. Problems growing out of the World War and the resulting modifications of international law as they prevail today.

- 82. History of American Foreign Policy.** Spring. M. W. F., 11:00. Three credit hours. Jensen.

This course traces the history of American foreign relations from the colonial period to the present. Attention is given to the principal issues of diplomatic controversy and settlement.

- 83. International Relations.** Autumn. M. W. F., 11:00. Three credit hours. Jensen.

A study of the major contemporaneous problems and developments in the field of international relations.

- 85. International Organization and Government.** Winter. T. Th. Two credit hours. (Not given this year.)

The rise and development of international government; diplomatic intercourse of states, international executive, administrative, legislative and judicial functions, agencies of international intercourse and cooperation.

- 88. The Pacific Area.** Spring. M. W. F., 9:00. Three credit hours. (Not given this year.)

A study of the economic, political, and colonial problems of this area, with the resulting international claims and rivalries.

- 90. The Constitution of the United States.** Winter. M. W., F., 11:00. Three credit hours. Jensen.

A course dealing with the history and development of the Constitution of the United States, a study of its fundamental provisions, their interpretation, and their application in the functioning of the American system of government.

- 95. Constitutional Law of United States.** Autumn. Daily, 11:00. Five credit hours. Jensen. (Not given this year.)

Jurisdiction of federal courts, citizenship, naturalization, suffrage, personal liberty, protection to persons accused of crime, due process and equal protection of the laws, police power, eminent domain, taxation, regulation of commerce, impairment of obligations of contracts, etc. A standard book of cases will be used.

Graduate Courses

- 151. Early European Political Philosophy.**

- 152. Modern European Political Philosophy.**

- 153. American Political Theories.
- 163. Municipal Problems.
- 174. English Government and Politics.
- 175. The British Commonwealth of Nations.
- 177. Political Party Systems in the United States and in European Countries.
- 180. International Law as Administered by the Courts.
- 181. The Conduct of American Foreign Relations.
- 182. History and Problems of American Foreign Policy.
- 183. International Relations and World Politics.
- 190. The Constitution of the United States.
- 195. Constitutional Law of the United States.
- 198. Research in Political Science.
- 200. Research for Master's Thesis.

Psychology

*Professors Poulson, Lambert; Assistant Professor Gibb;
Mr. Allen.*

Suggestions as to Courses. According to one's special interest in psychology, the following upper division courses are recommended:

General Culture: Psychology 68, 69, 75, 90, and 95.

Homemaking: Psychology 68, 69, 70, 75, and 86.

Business: Psychology 64, 65, 66, 70, 75, 76, and 85.

Teaching: Psychology 52, 66, 68, 70, 75, 76, 77, 85, and 86.

Social Work: Psychology 52, 68, 69, 70, 75, 76, 77, and 86.

Psychology Major. A total of thirty-six credit hours in Psychology is required, including not less than sixteen hours selected from Psychology 52, 66, 67, 76, 77, 90, 95, and seminars in Psychology. Prospective "school psychologists" should aim to meet the major requirements as nearly as possible.

Lower Division Courses

1. **Practical Psychology.** Autumn. M. W. F., 10:00. Winter, M. W. F., 11:00. Spring, 9:00. Three credit hours. Poulson.

A brief introduction to the fields of psychology followed by a special consideration of such topics as: effective methods of study, personality development, common mental hygiene problems, and techniques of sound and fruitful thinking.

11. **General Psychology.** Autumn, Daily 8:00. Winter, Daily 9:00. Spring, Daily, 8:00. Five credit hours. Poulson.

This course aims to provide a good introductory foundation for the whole field of modern scientific psychology. It is a prerequisite course for practically all advanced and more specialized courses in psychology. Includes a weekly period of simple laboratory demonstrations and experiments.

52. **Statistical Methods.** Winter. M. W. F., 2:00. Three credit hours. Lambert. (See Educational Administration 52.)

64. **Industrial Psychology.** Autumn. M. W. F., 11:00. Three credit hours. Poulson.

Important applications of psychology making for more satisfactory employer-employee relationships, more efficiency with less fatigue, better motivation and practices resulting in increased safety and understanding of personnel problems. Technique of psychological tests and interpretation of results as applied to industry. Prerequisite: a previous college course in psychology. Psychology 11 is recommended.

65. **Business Psychology.** Spring. M. W. F., 11:00. Three credit hours. Poulson.

A brief consideration of the psychological aspects of business, especially in the fields of advertising, personal selling, and research technique in these fields. Prerequisite:

site: a previous college course in psychology. Psychology 11 is recommended.

- 66. Experimental Psychology.** Lecture, T., 2:00. Laboratory, Daily, 2:00-4:00, or equivalent number of hours to be arranged. Three credit hours each quarter. Poulson.

Selected readings and laboratory work in experimental psychology to show how scientific technique is applied in the study of mental activity. Presentation of data in tabular and graphic form. Prerequisite: The consent of the instructor.

- 68. Psychology of Childhood and Adolescence.** Winter. M. W. F., 10:00. Three credit hours. Poulson.

Psychological description of the individual's development from birth to maturity, and theories of mental growth. Practical implications for parents, teachers, and social workers. (See Household Administration 68.) Prerequisite: Psychology 11, or equivalent.

- 69. Mental Hygiene.** Spring. M. W. F., 10:00. Three credit hours. Poulson.

A consideration of certain practical applications of mental hygiene of immediate value to students in meeting many of their personal problems. Also applications in educational and remedial social work will be indicated. (See Household Administration 69.) Prerequisite: Psychology 11, or equivalent.

- 70. Clinical Psychology.** Autumn. M. W. F., 4:00. Three credit hours. Allen.

A consideration of the critical diagnosis and practical management of children with personality and behavior difficulties. Detailed remedial procedures will be emphasized. Prerequisite: Psychology 11, or equivalent.

- 74. Advanced Educational Psychology.** Autumn, Winter. M. W. F., 1:00. Three credit hours. Poulson.

A brief consideration of certain important phases of the psychology of secondary education. The laws of economical learning, individual differences, and personality problems in teaching. Prerequisite: Psychology 11.

- 75. Social Psychology.** Winter. Daily, 8:00. Five credit hours. Poulson.

Social stimulation and response. Suggestion, propaganda, conflict. Psychology of leadership. Development of

religion and other social institutions. Educational implications. Prerequisite: Psychology 11, or its equivalent.

- 76. Psychological Tests.** Winter. M. W. F., 4:00. Three credit hours. Allen.

History, theory and use of different kinds of psychological tests and scales. Scientific interpretation and application of test results. Prerequisite: Psychology 11.

- 77. Mental Test Practice.** Spring. W., 4:00, and seven other hours per week to be arranged. Three credit hours. Allen.

Supervised training in the actual administration of psychological tests with emphasis upon Forms L and M of the new revised Stanford-Binet tests of intelligence. Prerequisite: Consent of the instructor.

- 85. Psychology of Motivation.** Autumn. M. W. F., 8:00. Three credit hours. (Not given this year.)

A careful review of some of the important experimental investigations of animal, child, and adult human motivation. Implications for parents, teachers, and social workers. Prerequisite: Psychology 11.

- 86. Psychology of Personality.** Winter. M. W. F., 10:00. Three credit hours. Poulson. (Not given this year.)

A consideration of the psychology foundations of human conduct. Varieties of adjustive and non-adjustive behavior. Problems of personality types. The wholesome personality. Mental hygiene problems of the home and school. Prerequisite: Psychology 11.

- 90. Advanced General Psychology.** Spring. Daily, 1:00. Five credit hours. Poulson.

A careful consideration of the general field of modern scientific psychology, and a thorough examination of various difficult topics. Prerequisites: Psychology 11 and 65, or equivalent.

- 95. History and Modern Viewpoints.** Autumn. Daily, 9:00. Five credit hours. Poulson.

A consideration of the historical background of present-day psychology and a comparative study of several of the important contemporary schools of psychology. Prerequisite: Psychology 11.

- 91, 92, 93. Psychology Seminar.** Autumn, Winter, and Spring. T., 4:00. One or two credit hours each quarter. Poulson.

Student reports and discussions based mainly on current psychological literature. Prerequisite: Twelve or more hours of credit in psychology.

Graduate Courses

- 166. **Experimental Psychology.** Winter. Lecture T., 2:00. Laboratory, Daily, 2:00-4:00, or equivalent number of hours to be arranged. Three credit hours. Poulson.
- 168. **Psychology of Childhood and Adolescence.** Winter. M. W. F., 10:00. Three credit hours. Poulson.
- 169. **Mental Hygiene.** Spring. M. W. F., 10:00. Three credit hours. Poulson.
- 170. **Clinical Psychology.** Autumn. M. W. F., 4:00. Three credit hours. Allen.
- 174. **Advanced Educational Psychology.** Autumn, Winter, M. W. F., 1:00. Three credit hours. Poulson.
- 175. **Social Psychology.** Winter. Daily, 8:00. Five credit hours. Poulson.
- 176. **Psychological Tests.** Winter. M. W. F., 4:00. Three credit hours. Allen.
- 177. **Mental Test Practice.** Spring. M. W. F., 4:00. Three credit hours. Allen.
- 185. **Psychology of Motivation.** Autumn. M. W. F., 8:00. Three credit hours. Gibb. (Not given this year.)
- 186. **Psychology of Personality.** Winter. M. W. F., 10:00. Three credit hours. Poulson. (Not given this year.)
- 190. **Advanced General Psychology.** Spring. Daily, 1:00. Five credit hours. Poulson.
- 195. **History and Modern Viewpoints.** Autumn. Daily, 9:00. Five credit hours. Poulson.
- 191, 192, 193. **Seminar in Psychology.** Autumn, Winter, and Spring. T., 4:00. One or two credit hours each quarter. Poulson and Staff.
- 200. **Thesis in Psychology.** Winter or Spring. Three to five credit hours. Poulson.

Research work in the preparation of a Master's Thesis. Prerequisites: Ten hours of upper division and graduate credit in psychology including Psychology 66 or 166. Also a course in statistical methods.

Division of Religion

This Division is under the immediate direction of the President of the University.

Professors Sessions, Sperry, Lloyd, Swensen, Eyring, Cummings, Martin, Pardoe, de Jong, Hansen, Miller, Lambert, Hart, Hales, Nicholes, Law, H. T. Christensen, Ballif, Morley; Associate Professors Sudweeks,, Coffman, Osmond; Assistant Professor Lee; Mr. J. R. Clark, Mr. Valentine, Mr. Crandall.

Courses which are starred (*) or their equivalent are required.

Theology and Religious Philosophy

Professor Sessions

Lower Division Courses

- *11. Social and Religious Teachings of Jesus.** Autumn, Winter, or Spring. Two credit hours R. Swensen, Coffman, Osmond.

A study of the social and religious teachings of Jesus with special emphasis on the Sermon on the Mount in the light of the present day application.

- *21. The Principles and Doctrines of Mormonism.** Autumn, Winter, or Spring. Two credit hours. Eyring, de Jong, Law.

A study of the basic principles and doctrines of the Church of Jesus Christ of Latter-Day Saints. The nature of religion, the Latter-day Saint concept of God, of Christ, and of man, and the ways of developing Divine-human relationships are considered.

- *22. Mormonism in Thought and Practice.** Autumn, Winter, or Spring. Two credit hours. Morley, Valentine.

Consideration is given to the first principles and ordinances of the Gospel of Jesus Christ; the place and func-

tion of ordinances in the Church and their application to the Mormon way of life.

23. **Joseph Smith and the Restored Gospel.** Autumn, Winter, or Spring. Two credit hours. Sessions, Cummings, Crandall.

The restoration of the Gospel and the founding of the Church of Jesus Christ and the need of the restoration constitute the first part of the course. This is followed by a study of Joseph Smith, the revealer and Prophet, the new Scripture he brought forth, and the Church he established.

Upper Division Courses

75. **Priesthood and Church Government.** Autumn. M. W., 8:00. Two credit hours. Sessions.

In this course the student will be led to see and appreciate Divine administration in every dispensation of the Gospel. The powers, authorities, and functions of the Priesthood; its organization and its importance in Church government, will be studied.

- 76, 77. **The Principles, Doctrine, and Philosophy of the Church of Jesus Christ of Latter-day Saints.** Winter, Spring. T. Th., 9:00. Two credit hours each quarter. Sessions.

This course will deal with the distinctive doctrines and principles of the Restored Gospel of Jesus Christ. It is an advanced course and will be adapted to students who have had seminary work or courses 21 and 23 of this department or their equivalent.

78. **The Principles of Genealogy and Temple Work.** Autumn or Winter. T. Th., 9:00. Two credit hours. Sudweeks.

Principal topics: genealogy in plan of salvation, mission of Elijah, relationship, research, pedigree, family and temple records, Genealogical Society of Utah, church ordinances, marriage, and temple work. Class trip to office of Genealogical Society.

79. **Current Christian Thinking.** Autumn. Time to be arranged. Sessions.

The problems presented to the Christian Churches through the World War will be discussed. The stresses, sufferings, anxieties, and frustrations of mankind today force serious responsibility upon religious leaders. Through a study of the current literature, an attempt will be made

to ascertain contemporary thoughts and trends in theology and religious leadership.

- 81. The Inter-relationship of Science and Religion.** Autumn, Winter, or Spring. T. Th., 11:00. Two credit hours. Hansen.

A survey of the major fields of science as they contribute to or are related to the major concepts in religion. "Religion and science are inextricably indebted to each other."

- 82. Seminar.** Autumn, Winter, or Spring. Time and credit to be arranged. Staff.

Intended for seniors and advanced students who wish to pursue special work in theology.

Church History

Professor R. Swensen

- *85, 86. Latter-day Saint Church History.** Autumn, Winter. T. Th., 9:00. Two credit hours. Swensen, Nicholes.

A history of the Church with a progressive study of the development of its institutions, beliefs, doctrines and religious practices in relation to their social and historical setting.

- 87. Biographies of Great Latter-day Saint Leaders.** T. Th., 11:00. Two credit hours. R. Swensen. (Not given this year.)

A study of the biographies of Joseph Smith, Brigham Young, and other great leaders of the Latter-day Saints. Sketches of their lives, background, distinctive characteristics, and important contributions to the Church.

- *88. Survey of Church History.** Autumn, Winter, or Spring. T. Th., Two credit hours. Swensen, Clark.

A survey of the rise of the Christian church from the time of the Apostles of Christ to the 19th Century, and a study of the Latter-day Saints Church and its relation to its ecclesiastical predecessors.

- 89. Builders of Early Christianity.** Spring. T. Th., 8:00. Swensen.

A study of the outstanding leaders in the early Christian Church from the Apostles down to Augustine in 400 A. D.

- *90. World Religions.** Autumn or Spring. T. Th., 9:00. Two credit hours. Ballif.

A survey of the major religions of the world. Christianity will be emphasized.

- 92, 93. Comparative Christian Religions.** Autumn, Winter. T. Th., 11:00. Two credit hours. Swensen.

A comparative study of contemporary Christian religions, their historical growth, famous leaders, theological creeds, church organizations, and present day trends.

Church Organization and Administration

Professor Lloyd

- *13T. Social Relations of College Students.** ("Courtship and Marriage.") Autumn, Winter, or Spring. Two credit hours. Lloyd, Christensen.

A consideration of problems of college students as they relate to courtship, marriage, and homemaking. Designed to assist students in the discovery of personal, social, and religious resources which may be used in successful family life.

- 41T. Missionary Training and Methods.** Autumn, Winter, or Spring. Two credit hours. Sessions. Time to be arranged.

Methods in missionary work of the L. D. S. Church. Consideration will be given to the history of Christian missions and comparative methods of approach.

- 42T. Methods in Religious Education.** Winter. T. Th., 10:00. Two credit hours. Law.

This course is designed to meet the demand for a church teacher training course in the lower division of the university for college students who may be either prospective or present day teachers in the church organizations. ~~The~~

course will include the essential material recommended for teacher training courses throughout the church.

Upper Division Courses

- 61T. Methods of Genealogical Research.** Spring. T. Th., 9:00. Two credit hours. Sudweeks.

A study of sources and methods. Research on each student's ancestral lines. Guidance on individual research problems. Acquaintance with library of Genealogical Society of Utah, and with genealogical section of B. Y. U. library. Prerequisite: the first course in genealogy, or consent of instructor.

- 67T. Religious Drama.** Winter. T. Th., 9:00. Two credit hours. Pardoe.

A study and practice of the forms and functions of drama in promoting the religious message.

- 68T. Religious Pageantry.** Spring. T. Th., 9:00. Two credit hours. Pardoe.

A study and production of religious pageantry and its place in promoting a religious message.

- 69T. Sacred Music: Appreciation and Conducting.** Autumn or Spring. T. Th., 9:00. Two credit hours. F. Madsen, (Not given this year.)

The place and influence of music in religion and worship. A study of its history and appreciation will be made. Students will be given instruction and practice in conducting.

- 72T. Methods in Religious Education.** Winter. T. Th., 9:00. Two credit hours. Law.

A consideration of the religious growth of children and adolescents, and a study of appropriate methods in their religious teachings.

- 73T. Methods in Religious Education.** (Recreational Leadership.) Autumn. T. Th., 9:00. Two credit hours. Holbrook and Hart.

This course is given to meet the needs of community, church, and school recreation leaders. Open to juniors and seniors. By permission of instructors.

- 75T. Methods in Religious Education.** Spring. T. Th., 9:00. Two credit hours. Staff.

A study of the religious growth of adults and children. Special emphasis is given to religious teaching in Church organizations and in the home.

76T. The Curriculum of Religious Education. Two credit hours. Staff.

The theory and practice of curriculum construction. A study of various types of curricula. The course will deal with a study of present curricula in the teaching organization of the church with a consideration of fundamental principles for future development.

78T. Methods of Religious Education. Winter. M. F., 3:00. Two credit hours. Law, Sessions.

Practice in teaching in Church organizations. After a study of methods in religious education, students will be assigned to local ward organizations under supervision, where they may do practice teaching in religion. (Registration by consent of instructor.)

80T. Problems of Leadership Preparation in the Church. Autumn, Winter, or Spring. T. Th., 11:00. Two credit hours. Lloyd.

***81T. L. D. S. Church Organizations and Administration.** Winter. T. Th., 9:00. Two credit hours. Lloyd.

A study of the pattern of general and local church organization. Special attention will be given to the administrative functions of the priesthood and the various auxiliary associations in the stakes and missions of the Church. Consideration will be given to the worship service and to making it effective as an instrument of religious devotion.

87T. Methods in Character Education. Winter. M. W. F., 11:00. Three credit hours. Lloyd.

A study of the methods and techniques of character education that are now used in the United States, and a critical evaluation of results. Special emphasis will be given to the place of religion in the development of character.

Bible and Modern Scripture

Professor Sperry.

OLD TESTAMENT

Upper Division Courses

- *51. An Introduction to the Old Testament.** Autumn, Winter, or Spring. Sec. 1, T. Th., 9:00. Two credit hours each quarter. Sperry. Sec. 2, T. Th., 9:00. Martin.

This course deals with the literary problems and structure of the Old Testament, emphasis being given to its religious content. An attempt is made to show that Israel's leaders have a vital religious message to the world of today.

- 52. The Manners and Customs of the Hebrews.** Autumn. T. Th., 11:00. Two credit hours. Sperry.

This course will deal with the psychology and social background of the Hebrew people, their towns, cities, pastoral life, trades and professions, their family life, etc. Throughout the course constant reference is made to the Old Testament.

- 53. The Archaeology of the Old Testament.** Winter. T. Th., 11:00. Two credit hours. Sperry.

The most important archaeological discoveries of modern times and their bearing on the history, literature, and religion of the Old Testament are considered in this course.

- 54. The Prophets and Israel's Culture.** Spring. T. Th., 11:00. Two credit hours. Sperry.

In this course the rise of Israel's religion is considered and special attention is given to the religious, social, and cultural aspects of the more important prophetic books.

- *56. The Message of the Twelve Prophets.** Autumn. M. W., 11:00. Two credit hours. Sperry.

In this course a careful study is made of the twelve minor prophets. The times and teachings of each prophet are emphasized and an attempt is made wherever possible to relate their teachings to the needs of our own day.

NEW TESTAMENT**Lower Division Course**

- *12. The Religion and Literature of the Apostolic Age.** Autumn, Winter, or Spring. Two credit hours. Swensen, Sessions, Lee

This is a study of the historical situations and problems in the early Christian church which impelled various authors to write the books of our New Testament. It deals also with the distinctive religious teachings and literary qualities of the New Testament writings.

Upper Division Courses

- 61. The Life and Letters of Paul.** Autumn. T. Th., 9:00. Two credit hours. Sessions.

A course in the life, and distinctive teachings of Paul. His cultural background in both its Greek and Hebrew aspects are studied. His missionary work and accomplishments are dealt with.

- 62. The Life of Jesus.** Spring. T. Th., 9:0. Two credit hours. Swensen.

A study of the life, career, and basic teachings of Jesus. It deals with the historical conditions in Palestine, the various social, economic, and religious problems which Jesus faced. His distinctive traits, character, personality, etc., as reflected in the Gospels are studied.

- 63. The History and Interpretation of the New Testament.** Spring. T. Th., 11:00. Two credit hours. Swensen.

A course dealing with the portions of the New Testament which are not treated in the courses above and interpretation of these portions during the various periods from ancient to modern times. The literary and religious influence upon modern society is also stressed.

MODERN SCRIPTURE

- *65. The Book of Mormon.** Autumn, Winter, or Spring. T. Th., 9:00. Two credit hours.

This course deals with the coming forth of the Book of Mormon, its content and teachings.

- 67. An Analysis of the Book of Mormon.** Winter. M. W. 11:00. Two credit hours each quarter. Sperry.

This is an advanced course giving a general introduction to the problems and teachings of the Nephite sacred literature.

- *68. The Doctrine and Covenants and The Pearl of Great Price.** Spring. T. Th., 8:00. Two credit hours. Sperry.

A careful study is made of the circumstances under which each of these scriptures came forth. The main doctrines and teachings of each are then stressed.

- 70, 71. The Doctrine and Covenants.** Autumn and Winter. T. Th., 9:00. Two credit hours each quarter. Lambert.

A study of the situations which brought forth the revelations contained in the Doctrine and Covenants, and a consideration of their content.

- 72. Departmental Seminar.** Autumn, Winter or Spring. Time and credit to be arranged. Staff.

Intended for seniors or other advanced students, who may be admitted by permission of the instructors.

BIBLICAL LANGUAGES

The following courses in Biblical Languages are offered. They carry religious credit and fulfill the language requirements for the A. B. degree:

- 51H, 52H, 53H. Elementary Hebrew.** Autumn, Winter, Spring. Daily, 1:00. Five credit hours each quarter. Sperry.

The elements of Hebrew grammar are thoroughly treated. Several elementary Hebrew books are read, followed by intensive drill in the Old Testament.

- 54H, 55H, 56H. Intermediate Hebrew.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours each quarter. Sperry.

Advanced grammar and readings from Genesis, Deuteronomy, Samuel, Kings, and certain of the Minor Prophets.

- 64H, 65H, 66H. Advanced Hebrew.** Autumn, Winter, Spring. T. Th. Time to be arranged. Two credit hours each quarter. Sperry.

This course consists of Hebrew syntax and selected readings from the Prophets and the Hebrew Wisdom Literature.

SYRIAC

51R, 52R, 53R. Elementary Syriac. Autumn, Winter, Spring. T. Th., 2:00. Two credit hours each quarter. Sperry.

Elements of grammar and readings from the Syriac New Testament. Hebrew 51, 52, 53, are prerequisites to these courses.

54R, 55R, 56R. Intermediate Syriac. Autumn, Winter, Spring. Th. One credit hour each quarter. Sperry. (Time to be arranged.)

Advanced grammar and readings from the Syriac Old and New Testaments and other church literature.

Note: For Aramaic and Akkadian see under Semitics.

GREEK

51G, 52G, 53G. Elementary Greek. Autumn, Winter, Spring. M. W. F., 1:00. Three credit hours each quarter. Swensen. (Time to be arranged.)

Courses in the study of New Testament Greek. They are especially designed for those who are majoring in religion and linguistics to give reading experience in the Greek New Testament and Greek papyrus.

54G, 55G, 56G. Intermediate Greek. Autumn, Winter, Spring. Time to be arranged. Three credit hours each quarter Swensen.

Readings and translations from the Greek New Testament and Xenophon.

57G, 58G, 59G. Elementary Modern Greek. Autumn, Winter, Spring. Time to be arranged. Three credit hours each quarter. Swensen.

A course in Modern Greek. A study in Greek as a living language with diversified graded readings and elementary grammar.

60G, 61G, 62G. Intermediate Modern Greek. Autumn, Winter, Spring. Time to be arranged. Three credit hours each quarter. Swensen.

Advanced readings in Modern Greek literature.

GRADUATE WORK IN RELIGION

Candidates for the master's degree in Religion are required to choose a major professor who is a member of the graduate staff in religion.

All applicants for this degree are expected to complete a course in thesis writing.

- 151. **An introduction to the Old Testament.** Literary problems and structure of the Old Testament. Sperry.
- 153. **The Archaeology of the Old Testament.** Important archaeological discoveries of modern times. Sperry.
- 154. **The Prophets and Israel's Culture.** Rise of Israel's religion. Social and cultural aspects of the prophetic books. Sperry.
- 161. **Life and Letters of the Apostle Paul.** Sessions.
- 162. **Life of Jesus.** The life, career, and basic teachings of Jesus. Swensen.
- 163. **History and Interpretation of the New Testament.** Swensen.
- 167. **An Analysis of the Book of Mormon.** Sperry.
- 170, 171. **The Doctrine and Covenants.** Lambert.
- 172. **Departmental Seminar.** Staff.
Biblical Languages. Sperry and Swensen. All courses listed in the Biblical Languages are acceptable for graduate credit.
- 176, 177. **Principles, Doctrines, and Philosophy of the Church of Jesus Christ of Latter-day Saints.** Sessions.
- 181. **The Inter-relationships of Science and Religion.** Interpretation of scientific concepts in their relation to religious problems. G. Hansen.
- 185, 186. **Latter-day Saint Church History.** Nicholes.
- 189. **Builders of Early Christianity.** Christian leaders from the Apostles to Augustine. Swensen.
- 191. **World Religions.** Survey of the major religions of the world. Lloyd.
- 192, 193. **Comparative Christian Religions.** Swensen.

172T. Methods in Religious Education. Religious growth and teachings of adolescence. Lloyd.

176T. The Curriculum of Religious Education. Lloyd.

181T. Latter-day Saint Church Organization and Administration. Lloyd.

187T. Method in Character Education. Lloyd.

188T. Seminar in Religious Education. Staff.

Sociology

Professors Christensen, Ballif; Professors Emeritus Swensen, Boyle.

As a prerequisite to any upper division course in the department, students must take either Sociology 11 or 12.

Majors in the department are required to take courses 11, 12, 53, 55, 70, 79, 80, 81, 82, and 98. Should an exemption from any of these course requirements seem advisable, it must be obtained before the Senior year by making special arrangements to substitute other courses for the one omitted.

Majors and minors are not only advised to take as many courses in the department as they can, but to broaden their background with courses in related fields; such as Economics, History, Political Science, Psychology, Zoology, Geography, Geology, Philosophy of Education, etc.

Sociology is one of the subjects comprising the composite major in Social Science designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

- 11. Introduction to the Study of Sociology.** Autumn, Ballif. Winter, Christensen. Daily, 8:00. Five credit hours each quarter.

This course is designed to give the groundwork for social study. It presents a general view of social organization, social forces, and a practical working theory of the nature of society.

12. **Social Problems.** Spring. Daily. 8:00. Five credit hours. Ballif.

This course deals with specific social problems such as crime, poverty, racial conflicts, etc. Discussions, papers, and assigned readings.

Upper Division Courses

51. **Community Organization and Leadership.** Autumn, M. W. F., 1:00. Three credit hours. Ballif.

Problems of community life and action, and the methods of promoting them through organization and leadership.

53. **Rural Sociology.** Autumn. M. W. F., 11:00. Three credit hours. Christensen. (See Agricultural Economics 53.)

Survey of social conditions in the rural life of America, in operation at the present time.

55. **Principles of Sociology.** Winter. M. W. F., 8:00. Three credit hours. Swensen.

57. **Population Problems.** Spring. M. W. F., 11:00. Three credit hours. Christensen.

A study of the growth and distribution of population. Such subjects as population density and mobility, birth and death rates, eugenic considerations, etc., will be discussed.

58. **Human Ecology.** Autumn. T. Th., 9:00. Two credit hours. Ballif.

A study of the spacial relationships of man as determined by his adaptation to physical and social environment. Discussions will center on such subjects as isolation, interaction, segregation, invasion, etc.

61. **Educational Sociology.** Autumn. M. W. F., 9:00. Three credit hours. Swensen.

An introductory study of the principles of educational sociology and their application to the theory and practice of school administration, curricula and methods of instruction.

- 66. Urban Sociology.** Winter. T. Th., 9:00. Two credit hours. Swensen.

A study of the evolution and problems of urban life, with special emphasis on the economic, ethical, and political influence of cities on modern society.

- 70. Social Control.** Spring. M. W. F., 8:00. Three credit hours. Swensen.

A study of the means of control of the individual by groups. Such agencies as public opinion, belief, social suggestions, ceremony, personal ideals, etc., will be studied in detail.

- 71. Juvenile Sociology.** Autumn, Winter, or Spring. T. Th., 8:00. Two credit hours. Boyle.

This course deals with the educational problems of the adolescent, as related to the home, the school, industry, the community, and his own group.

- 72. Crime and Delinquency.** Winter. M. W. F., 1:00. Three credit hours. Ballif.

A study of the nature and extent of crime, particularly in the United States. The course deals with the causes and also the treatment of crime, as it is followed in our penal institutions.

- 74. Social Psychology.** Spring. M. W. F., 9:00. Three credit hours. Ballif.

A study of the social factors which influence human behavior. This course attempts to evaluate the social significance of mob-mind, propaganda, and other group phenomena.

- 75. The Family.** Spring. M. W. F., 10:00. Three credit hours. Christensen.

A study of the history and development of the family as a social institution. The course also considers the modern family and its problems.

- 76. An Introduction to the Field of Social Work.** Autumn. T. Th., 1:00. Ballif.

An introductory survey of various fields and methods of social work; the extent of social work and its implications for related professions.

- 77, 78. Social Case Work.** Winter. Th., 4:00. Two credit hours each quarter. Staff.

Principles and practices of case work with the maladjusted and the dependent.

- 79. Methods of Research in Sociology.** Autumn. M. W. F., 10:00. Three credit hours. Christensen.

A critical survey of the various methods used in the investigation of sociological data. An attempt will be made to develop a theory of social research.

- 80. Social Statistics.** (See Economics 74.)

- 81. The History of Social Theory.** Spring. M. W. F., 9:00. Three credit hours. Swensen.

The course deals with evolution of social theories beginning with Plato and considering the developments through the early Christian Era and also the Medieval and modern social theorists.

- 82. Contemporary Sociology.** Winter. M. W. F., 9:00. Three credit hours. Ballif.

A consideration of the present-day sociologists and their contributions. Attention is given to the writings of leading social technologists.

- 85. Social Legislation.** Winter. M. W. F., 11:00. Three credit hours. Ballif.

The underlying principles and techniques of social legislation. A consideration of social legislation now operative, particularly in Utah, with special reference to needed measures.

- 90. Labor Problems.** (See Economics 61.)

- 93. Race and Racial Problems.** Spring. T. Th., 9:00. Two credit hours. Ballif.

An analysis of the classifications and distribution of races, and of the problems which grow out of racial conflict.

- 96. Cultural Anthropology.** Winter. M. W. F., 10:00. Three credit hours. Christensen.

An analysis of the social institutions of primitive people and how those institutions have developed. The meaning and content of culture.

- 98. Seminar.** Winter. Swensen, Christensen, Ballif. Time to be arranged. Two credit hours.

Informal round-table discussions on current sociological problems.

Graduate Courses

- 101, 102, 103. Research.** Time and credit to be arranged. Swensen, Ballif, and Christensen.

Opportunity is given for the student to work out a problem in the field of his greatest interest. Direction in the methodology of research in the social science field, and in the presentation of material.

- 151. Community Organization and Leadership.** Autumn. M. W. F., 1:00. Three credit hours. Ballif.
- 153. Rural Sociology.** Autumn. M. W. F., 11:00. Three credit hours. Christensen.
- 155. Principles of Sociology.** Autumn or Winter. Daily, 8:00. Five credit hours. Swensen.
- 157. Population Problems.** Spring. M. W. F., 11:00. Three credit hours. Christensen.
- 158. Human Ecology.** Autumn. T. Th., 9:00. Two credit hours. Ballif.
- 161. Educational Sociology.** Autumn. M. W. F., 9:00. Three credit hours. Swensen.
- 166. Urban Sociology.** Winter. T. Th., 9:00. Three credit hours. Swensen.
- 170. Social Control.** Spring. M. W. F., 8:00. Three credit hours. Swensen.
- 171. Juvenile Sociology.** Spring. T. Th., 8:00. Two credit hours. Boyle.
- 172. Crime and Delinquency.** Winter. M. W. F., 1:00. Three credit hours. Ballif.
- 174. Social Psychology.** Winter. M. W. F., 9:00. Three credit hours. Christensen.
- 175. The Family.** Spring. M. W. F., 10:00. Three credit hours. Christensen.
- 176. An Introduction to the Field of Social Work.** Autumn. T. Th., 1:00. Two credit hours. Ballif.
- 177, 178. Social Case Work.** Autumn, or Winter. Th., 4:00. Two credit hours each quarter.
- 179. Methods and Research in Sociology.** Autumn. M. W. F.,

- 10:00. Three credit hours. Christensen.
180. **Social Statistics.** Winter. Three credit hours. (See Economics 74.)
181. **The History of Social Theory.** Spring. M. W. F., 9:00. Three credit hours. Swensen.
182. **Contemporary Sociology.** Winter. M. W. F., 9:00. Three credit hours. Ballif.
185. **Social Legislation.** Winter. M. W. F., 11:00. Three credit hours. Ballif.
190. **Labor Problems.** Autumn. Three credit hours. (See Economics 61.)
193. **Race and Race Problems.** Spring. T. Th., 9:00. Two credit hours. Ballif.
196. **Cultural Anthropology.** Winter. M. W. F., 10:00. Three credit hours. Christensen.
198. **Seminar.** Winter. Time to be arranged. Two credit hours. Swensen, Christensen, Ballif.
200. **Thesis.**

Speech

Professors Pardoe, De Jong, Cummings, Morley; Mr. Clinger, Miss Billings, Mr. Ungermann, Mr. Geertsen.

Students majoring in this department are required to furnish two years in a foreign language. Those who have had two years of a foreign language in an accredited high school need take only one additional year in the University.

Students may elect one of the five divisions:

Requirements for **Dramatic Art** are Speech, 1, 2, 4, 11, 12, 21, 42, 43, 58, 60, 61, 72, 73, 77, 78, 81p, 87p, and 94 or 96.

Requirements for **Public Speaking** are Speech 1, 2, 3, 4, 11,

12, 51, 52, 53, 59, 72, 84p, 91, and 96.

Requirements for **Play Production** are Speech 1, 11, 12, 21, 22, 42, 43, 71, 72, 73, 74, 76, 77, 78, 91, 94, or 96.

Requirements for **Speech Correction and Science** are Speech 1, 2, 4, 11, 12, 42, 52, 91, 94, 95, 96. Psychology 69, 77; Zoology 65. are recommended.

Requirements for **Radio Technician and Broadcasting** are Speech 11, 12, 55, 56, 58, 59, 60, 72; Mathematics 11, 12; Physics 41, 42, 43, 67; Journalism 59; and Psychology 11.

It is advisable to register for Physics 1, Psychology 11, Psychology 74, and Art 21.

Students minoring in Speech should qualify in the following courses: Speech 1, 2, 4, 11, 12, 51 or 52, 72, 91, and 95.

Speech is one of the subjects comprising the composite major in **Language Arts** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Lower Division Courses

- *1. **Principles of Speech.** Autumn. Sec. 1, M. W. F., 11:00. Sec. 2, M. W. F., 1:00. Three credit hours. Morley.

The elements of speech, development of ability in the fundamental processes of speech. The outlining and delivery of short speeches constitute the major portion of this course.

- *2. **Open Forum Discussions.** Winter. Sec. 1, M. W. F. 11:00. Sec. 2, M. W. F., 1:00. Three credit hours. Morley.

Practice in extemporaneous speech in types of public discussions. Application of speech principles. Vocabulary building.

- *3. **Speech Analysis.** Spring. Sec. 1, M. W. F., 11:00. Sec. 2, M. W. F., 1:00. Three credit hours. Morley.

The study of models of speech composition. Practice in delivery and analysis. Individual needs especially motivated.

4. **Voice and Diction.** Autumn, Winter, Spring. T. Th., 2:00. Two credit hours. Morley.

A laboratory study and supervised development of good voice and diction. Especially planned for prospective teachers.

- 5. Speech Clinic.** Students may enter at any time during the year. Morley.

Corrective treatment of stuttering, stammering, lisping, oral inaccuracy, poor voice and other forms of speech and voice disorders. A thorough diagnosis will be made and treatment organized in accordance with individual needs. Time and fee to be arranged.

- *11. Elementary Speech Problems and Pantomime.** Autumn. Sec. 1, M. T. W. Th., 8:00. Sec. 2, M. T. W. Th., 9:00; Sec. 3, M. T. W. Th., 2:00. Four credit hours. Pardoe and Ungermann.

Fundamental principles of speech arts, with emphasis on pantomime. Required of all speech majors.

- *12. Basic Voice Problems for Radio and Drama.** Winter. Sec. 1, M. T. W. Th., 8:00; Sec. 2, M. T. W. Th., 9:00; Section 3, M. T. W. Th., 2:00. Four credit hours. Pardoe and Ungermann.

Emphasis on voice for interpretation. Required of all majors.

- *13. Basic Voice Problems and Interpretation.** Spring. Sec. 1, M. T. W. Th., 8:00; Sec. 2 M. T. W. Th., 9:00; Section 3, M. T. W. Th., 2:00. Four credit hours. Pardoe and Ungermann.

Special attention is given to the dramatic monologue and soliloquy—interpretation of the printed page.

*Classes in Speech 1, 2, 3, 11, 12, and 13, are limited to twenty members. Assignments are made by Speech Department at Registration.

- 21. Interpretive Literature.** Autumn. M. W. F., 9:00. Three credit hours. Pardoe and Ungermann.

Character delineation forms a great portion of this work.

- 22. Dialogue and Scene Presentation.** Winter. M. W. F., 9:00. Three credit hours. Pardoe and Ungermann.

The great scenes from Shakespeare and classic literature. Character analysis and presentation. Prerequisites: Courses 11, 12, 13.

- 42. Practical Phonetics.** Autumn or Winter. M. W. F., 11:00. Three credit hours. Cummings.

A course prescribed for all majoring in Speech. Given to aid students to acquire a better understanding of English and foreign diction. (See Department of Modern and Classical Languages. Phonetics 42.)

- 43 or 44. Phonetic Dialect.** Spring. M. W. F., 11:00. Three credit hours. Pardoe.

A study of dialect as an element in interpretation. Scotch, Italian, and Yiddish alternate each year with Cockney, Negro, and class choice. Scotch on even years. Prerequisite: Course 42.

Upper Division Courses

- 51. Advanced Speech Composition.** Autumn. M. W. F., 9:00. Three credit hours. Morley. (Given on even years.)

An intensive study of the organization of advanced forms of public speaking and practical experience in delivery.

- 52. Argument and Debate.** Winter. M. W. F., 9:00. Three credit hours. Morley. (Given on even years.)

A study of the principles of argument followed by a series of debates on current questions. (See English 52.) Prerequisites: English 1, 2, 3; Speech 1, 2.

- 53 History of Theories of Public Speaking.** Spring. M. W. F., 9:00. Three credit hours. Morley.

A comparative study of world oratory. (Given in even years.)

- 54. Advanced Debate.** Winter. One credit hour.

For such members of the debating squad as can qualify for this course, subject to the approval of the Speech Department and the Debate Council. They must register for the course.

- 55, 56, 57. Mechanics of Radio Broadcasting.** Autumn, Winter, and Spring. T. Th., 9:00. Two credit hours.

Microphone and its use, studio acoustics, mixing and sound effects, recording and audio-instrument techniques.

- 58, 59, 60. Radio Broadcasting.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours. Pardoe.

Continuity writing and newscasting. Technique of radio speech and preparation for broadcasting. Prerequisites: Speech 4 or 12.

- 61. Impersonation.** Autumn. M. T. Th. F., 2:00. Four credit hours. Pardoe.

An advanced course leading to the reading of full programs. Only those who have built a proper voice foundation and who can qualify in Speech 1, 2, 11, 12, 13, and 22, are eligible.

The Mask Club is the laboratory for all performances.

- 65. Historic Costume and Costume Design.** Winter. M. W. F., 1:00. Three credit hours. Billings.

Historic development of fashion and fashion trends. Costume studies for plays and period designing.

- 71. Play Production.** Autumn and Winter. Daily, 11:00. Three credit hours. Ungermann.

For advanced students only. Courses 11, 12, 13, and 22, are prerequisites. Laboratory, College Hall, 4:00.

- 72. Stage Craft.** Spring. Daily, 11:00. Three credit hours. Ungermann.

It is suggested that students take Art 21 as a preparation for this course. Laboratory, College Hall, 4:00.

- 73. Acting.** Spring. Daily, 2:00. Three credit hours. Pardoe.

For advanced students only. Required of all seniors majoring in Speech and Language Arts. Laboratory, College Hall, 4:00.

- 74. Technique of Playwriting.** Autumn. M. W. F., 3:00. Three credit hours. Pardoe. Given in alternate years.

The writing and producing of original plays. with emphasis on western themes.

- 75. Make-up.** Autumn and Winter. T. Th., 3:00. Two credit hours. Ungermann.

General course in make-up for students in acting, teachers of drama and opera, and Mutual drama directors.

- 76. Advanced Play Production.** Spring. Daily, 3:00. Three credit hours. Pardoe and Ungermann. Prerequisite: Speech 7.

- 77. History of Dramatic Production.** Autumn. T. Th., 2:00. Two credit hours. Ungermann.

The Egyptian, Grecian, and Roman Theatre. A study of the means employed in the theatrical presentations of these periods.

- 78. History of Dramatic Production.** Winter. T. Th., 2:00. Two credit hours. Ungermann.

Oriental, Medieval and Elizabethan Theatre.

- 80. History of Dramatic Arts.** Winter. T. Th., 2:00. Two credit hours. Pardoe.

A survey of teachers and methods of teaching dramatic arts. (Given on odd years.)

- 81p. Dramatic Technique.** One credit hour each quarter for each recitation period per week. Pardoe.

An intensive individual course in advanced interpretation. Time and fee to be arranged with instructor.

- 84p. Public Speaking.** One credit hour per quarter for each recitation per week. Pardoe and Morley.

An intensive individual course designed for those who desire to concentrate on organization and delivery of the more advanced forms of public speech. Time and fee to be arranged with instructor.

- 87p. Voice and Speech Improvement.** One credit hour per quarter for each recitation per week. Pardoe and Morley.

An intensive individual course designed to help the student acquire good speech habits with particular attention to development of a pleasing, well-modulated speaking voice. Time and fee to be arranged by instructor.

- 91. Methods of Teaching Speech.** Autumn. T. Th., 8:00. Two credit hours. Clinger and Staff.

Organization of high school departments of speech. Selection of materials and methods to be employed in speech teaching.

- 94. Speech Correction.** Autumn, Winter. M. W. F., 8:00. Three credit hours. Morley.

A study of the physiology, physics, and neurology of normal speech; the types of abnormal or defective speech; their diagnosis and methods of treatment. The course fulfills state requirement for elementary teachers.

- 95. Clinical Methods in Speech Correction.** Autumn. Winter. T. Th., 3:00. Two credit hours. Morley.

Study and training in the methods of diagnosis, treatment and use of equipment in speech correction. Handling of actual cases will form an important part of the course. The course fulfills state requirement for elementary teachers.

96. **Psychology of Speech.** Spring. M. W. F., 8:00. Three credit hours. Morley.

A study of the psychological elements of language and expression. (Given in odd years.)

Graduate Courses

- 143 or 144. **Dialect Research.** Spring. M. W. F., 11:00. Laboratory, two hours per week. Three credit hours. Pardoe. Prerequisite: Speech 42.

151. **Advanced Speech Composition.** Autumn. M. W. F., 9:00. Three credit hours. Morley. (Given in even years.)

An intensive study of the organization of advanced forms of public speaking and practical experience in their delivery. Each student will make an individual study of an eminent orator.

152. **Argument and Debate.** Winter. M. W. F., 9:00. Three credit hours. Morley. (Given in even years.)

Advanced study of principles of argument and experience in their use by applying them in a series of debates on current questions. An individual study of some phases of argument or logic will be required. Prerequisites: English 1, 2, 3, and Speech 1 and 2.

153. **History of Public Speaking.** Spring. M. W. F., 9:00. Three credit hours. (Given in alternate years.) Morley.

A comparative study of world oratory.

- 155, 156, 157. **Mechanics of Radio Broadcasting.** Autumn, Winter, and Spring. T. Th., 9:00 (Not given this year.)

- 158, 159, 160. **Radio Broadcasting.** Autumn, Winter, Spring. M. W. F., 10:00. Three credit hours. Pardoe.

171. **Play Production.** Autumn and Winter. Daily, 11:00. Three credit hours. Ungermann.

172. **Stage Craft.** Spring. Daily, 11:00. Three credit hours. Pardoe, Ungermann.

- 173. Acting.** Spring. Daily, 2:00. Three credit hours. Pardoe.
- 174. Technique of Playwriting.** Autumn. M. W. F., 3:00. Three credit hours.
The writing and producing of original plays. (Given in alternate years.)
- 177. History of Dramatic Production.** Winter. T. Th., 2:00. Two credit hours. Ungermann.
Ancient history of dramatic production. (Given in odd years.)
- 178. History of Dramatic Production.** Winter. T. Th., 2:00. Two credit hours. Ungermann.
Oriental, Medieval, and Elizabethan. (Given in odd years.)
- 180. History of Dramatic Arts.** Winter. T. Th., 2:00. Two credit hours. Pardoe. (Given in odd years.)
- 181. Seminar in Radio.** Time and place to be arranged. One to three credit hours. Pardoe.
- 191. Methods of Teaching Speech.** Autumn. T. Th., 8:00. Two credit hours. Clinger.
- 194. Speech Correction.** Autumn. Winter. M. W. F., 8:00. Two credit hours. Morley.
An advanced study of the nature, causes, and treatment of all types of speech disorders. An individual research problem required.
- 195. Clinical Methods in Speech Correction.** Autumn, Winter T. Th., 3:00. Two credit hours. Morley.
Study and training in the methods of diagnosis, treatment and use of equipment in the modern speech clinic. Work with cases will form important part of the work. Students will make an individual study of some important clinical problems. The course fulfills state requirements for elementary teachers.
- 196. Psychology of Speech.** Spring. M. W. F., 9:00. Three credit hours. Morley.
A study of the psychological elements of language and expression.
- 197. Seminar in Speech Science.** Time and place to be arranged. One or two credit hours. Morley.

198. **Seminar in Public Speaking or Dramatic Arts.** Time and place to be arranged. One to three credit hours. Pardoe.
200. **Thesis.** Three to five credit hours. Time to be arranged. Pardoe, Morley.

Individual research upon a problem of importance to speech. Ability to conduct experiments necessary. Subject must be submitted for work during at least three quarters.

Zoology and Entomology

*Professors Tanner, Cullimore; Associate Professor Hayward;
Assistant Professors Johanson, Beck, Anderson.*

Students majoring in this department must complete courses 11, 18, 28, 30, 55 or 73, 57, 59, 65, 70, 72, 75, and 97. Substitution of other courses is permitted in special cases. Students are advised to complete two years of German and French if they contemplate doing advanced work in Zoology or Entomology. All course work should be taken in the following sequence: Freshman 11, 18, and 30; Sophomores 28, 65, and 55 or 73; Juniors 57, 59, and 70; Seniors 72, 75, and 97.

Students who expect to study Medicine may take Zoology for their major subject and should complete the following courses in the sequence indicated: Freshmen 11 and 18; Sophomores 65 and 55 or 73, Juniors 70, 71 and 56; Seniors 72 and 75.

Students who desire to teach Biology in the high school should complete the following courses: 11, 18, 28, 30, 57, 53, 59, 45, and 77; Botany 1, 2, 3, and 60; Bacteriology 21 and 22.

Zoology and Entomology are some of the subjects comprising the composite major in **Biological Science** designed for prospective teachers and described in the section entitled "Colleges" in the introduction to the catalogue.

Facilities for the Study of Zoology and Entomology

The natural history collections consist of a very complete collection of Utah fish, amphibians, reptiles, birds, and mam-

mals. This collection is also supplemented by the Chester Van Buren collection of birds from Magdalena River of Colombia, and the David Starr Jordan collection of fish from the Hawaiian Islands. The entomological collection contains authoritatively named specimens in all the orders of insects. The pinned insects are placed in four hundred trays, 18x19 inches in size, two inches deep. The specimens are pinned in unit boxes. The Lepidoptera collection is a very complete one of Utah and the Great Basin region. It contains over six hundred named species and ten thousand specimens. It is made up of the famous Tom Spaulding collection and the Chester Van Buren collections. The Coleoptera collection contains over six thousand determined species and forty thousand specimens. It contains a very complete collection of weevils, the Chas. W. Leng collection of 1676 species, 300 species from the Blatchely collection and the Charles Schaeffer weevil collection, consisting of 813 species. Many type, cotype, and paratype specimens are in the collections. All these collections are housed in the new fireproof Geo. H. Brimhall Building.

ZOOLOGY

Lower Division Courses

11. **General Zoology.** Autumn, Winter, or Spring. M. W. F., 9:00. Laboratory, Sec. 1, T. Th., 1:00-3:00. Sec. 2, T. Th., 3:00-5:00. Sec. 3, M. W., 1:00-3:00. Sec. 4, M. W., 3:00-5:00. Five credit hours. Tanner.

Fundamentals of structure, physiology, development, heredity, adaptations, classifications, and bearing of Biology on human life.

18. **Heredity.** Autumn, Winter and Spring. M. W. F., 8:00. Three credit hours. Tanner. (In Spring quarter, given in conjunction with Zoology 97.)

A study of the facts which form a basis for the knowledge of heredity and variation in plants and animals, with special emphasis on heredity in man. The course is designed to give prospective teachers a good background in facts relating to the importance of heredity and environment in the development and life of man. Prerequisite: A course in General Zoology or General Botany.

21. **Heredity Laboratory.** Autumn, Winter, and Spring. T. Th., 8:00. Two credit hours. Tanner.

A study of the facts which form the basis of our know-

ledge of heredity in plants and animals. This course is to be taken along with Zoology 18, or Zoology 18 is a prerequisite.

28. **Aquatic Zoology.** Autumn. M. W., 8:00. F., 1:00-3:00. Three credit hours. Tanner. (Not given this year.)

A general course in the study of fresh water animals of Utah Lake.

45. **Vertebrate Anatomy and Physiology.** Winter and Spring. M. W. F., 8:00. Laboratory, T. Th., 1:00-4:00. Four credit hours. Hayward.

This course is designed for the majors and minors in physical education. The instruction will provide for a preparation to teach such subjects as physiology, hygiene, and general zoology in the high school curricula. A general survey of the vertebrate animals will be undertaken. A thorough appreciation of comparative anatomy of representative vertebrates and their physiology will constitute the main part of the laboratory work.

Upper Division Courses

53. **Animal Ecology.** Spring. M. W. F. S., 9:00. Three credit hours. Hayward. (Not given this year.)

The environment, natural habitats, adaptations, relationships of organisms, and distribution of species and communities will be considered. Prerequisites: Zoology 11, 28, 57, 59, and Entomology 30.

55. **Invertebrate Zoology.** Spring, T. Th., 10:00. Laboratory, M. W. F., 3:00-5:00. Five credit hours. Tanner.

This course is designed to follow Zoology 11, and is intended to give the students a broader knowledge of the morphology and relationship of the invertebrate groups.

56. **Comparative Anatomy.** Autumn. T. Th., 9:00. M. W. F., 2:00-5:00. Five credit hours. Hayward.

A detailed study of the comparative anatomy of the vertebrates. Prerequisite: Zoology 11 and 55.

57. **Vertebrate Zoology: Birds and Mammals.** Spring. M. W. F., 8:00. Three credit hours. (Not given this year.)

A course in the evolution, structure, classification, and distribution of birds and mammals with special reference to the Utah species. Prerequisite: Zoology 11.

58. **Health Education for Teachers.** Autumn, Winter, Spring.

M. W. F., 2:00. Three credit hours. Hayward and Cullimore.

Designed especially for those who are preparing to teach in the public schools. Prerequisites: Zoology 11, and Bacteriology 21.

- 59. Cold Blooded Vertebrates: Fish, Amphibians and Reptiles.** Winter. M. W. F., 8:00. Three credit hours. Tanner. (Not given this year.)

An introductory course dealing with the problems relating to the evolution, life history and classification of cold blooded vertebrates found in this region.

- 61. Nutritional Physiology.** Winter. T. Th. S., 8:00. Three credit hours. Johanson.

A course designed to acquaint students with the methods employed in small animal experimentation. Feeding experiments will be conducted with emphasis placed upon the deficiency diseases and protein and mineral requirements in the diet. Prerequisite: Organic Chemistry. (See Animal Husbandry 61.)

- 62. Special Problems in Nutritional Physiology.** Spring. Time and credit to be arranged. Johanson.

Students will carry on individual research work with white rats, chickens, and turkeys. Prerequisite: Zoology 61.

- 65. Human Physiology.** Autumn. M. W. F., 9:00. Laboratory T. Th., 2:00-5:00. Five credit hours Hayward.

This course is designed to give the student a working knowledge of the life processes as they function in man. Prerequisite: Zoology 11. (See Animal Husbandry 65.)

- 70. Histological Organography and Technique.** Winter. T. Th., 9:00. Laboratory, M. W. F., 3:00-5:00. Three or five credit hours. Hayward.

A microscopic study of the tissues and organs of vertebrates and the technique of preparing slides. Students desiring the course without the technique part will register for three credit hours only. Prerequisite: Zoology 11.

- 72. General Embryology.** Spring. T. Th., 1:00-5:00. Three credit hours. Hayward.

The origin and development of the organs and organ-systems of vertebrate animals, especially the chick, are studied.

- 73. Animal Parasitology.** Spring. T. Th., 10:00. Laboratory, M. W. F., 3:00-5:00. Five credit hours. Tanner.

A general course dealing with a study of the more common animal parasites, their identification and pathogenicity. Considerable time will be spent in elementary clinical diagnosis of more common species of parasitic species. Prerequisites: Zoology 11. This course or Zoology 55 may be used to fill pre-medical requirements.

- 75. History of Biology.** Winter. T. Th., 11:00. Two credit hours. Tanner.

A study of the development of biological thought from the time of the earliest writers to the present.

- 77. Nature Study for Teachers.** Spring. M. W. F., 7:00. Three credit hours. (Not given this year.)

A practical course dealing with the birds and other animals of the region, and some plant life in relation to nature study and biology courses. Students will be taught to identify the common animals and trees by means of prepared specimens and field trips. Instruction will also be given in methods of collecting and preserving natural history material for elementary and high school work. A study of aquaria and animals for the school room will be made.

- 80, 81. Junior Year Seminar. 82, 83. Senior Year.** Autumn, Winter W., 4:00. One credit hour for each quarter. Staff.

Required of all majors in this department during their junior and senior years.

- 85. Fresh Water Zoology Problems.** Spring. Time and credit to be arranged. Tanner.

Special problems dealing with the Plankton, Molluska, insects, fish, etc., of the lake. Problems will be assigned to individual students.

- 91, 92, 93. Field Zoology.** Time and credit to be arranged. Tanner, Beck, and Hayward.

Students may make extensive collections of the animal life of this state or adjoining states and then make a report of the same. This course aims to give training in systematic Zoology and museum work.

- 97. Genetics and Racial Hygiene.** Spring. M. W. F., 10:00. Three credit hours. Tanner.

This course attempts to lay a foundation for the understanding of the various problems which relate to the ori-

gin and genetics of the human race, with emphasis upon such phases as race origins, race deteriorations, race supremacy, and race betterment. The subject matter of the course will include such topics as the following: origin, characteristics and classification of the main divisions of races; population policies, problems of eugenics and genetics; marriage laws, in-breeding and out-breeding; sterilization laws; and future of the human race and race betterment.

Graduate Courses

113, 114, 115. **Research Work in Systematic Vertebrate Zoology.** Time and credit to be arranged.

117, 118, 119. **Zoological Research.** Time and credit to be arranged.

This course is open to all students prepared to do graduate work in any branch of zoological science.

153. **Animal Ecology.** (See Course 53.)

157. **Vertebrate Zoology.** (See Course 57.)

159. **Cold Blooded Vertebrates.** (See Course 59.)

161. **Nutritional Physiology.** (See Course 61.)

162. **Special Problems in Nutritional Physiology.** (See Course 62.)

175. **History of Biology.** (See Course 75.)

197. **Genetics and Racial Hygiene.** (See Course 97.)

200. **Research Thesis.** Credit by arrangement.

This course is required of all students seeking a master's degree in this department.

ENTOMOLOGY

Lower Division Courses

30. **Elementary Entomology.** Autumn. M. W. F., 10:00. Laboratory, M. W., 2:00-4:00. Five credit hours. Tanner.

This course is intended to interest students in insect life. A study of the structure, development and classification.

cation of some of the more important insects will form a basis of this course.

- 31. Morphology of Insects.** Winter. M., 9:00. Laboratory, W. Th. F., 1:00-3:00. Four credit hours. Tanner.

It is the purpose of this course to teach the structures of insects and the importance of these structures in a systematic study of insects. A few typical insects will be thoroughly studied. (Not given this year.)

- 32. Insect Classification** Spring. M., 9:00. Laboratory, W. Th. F., 1:00-3:00. Four credit hours. Tanner.

- 33. Medical Entomology.** Autumn. M. W. F., 10:00. Laboratory. M. W., 2:00-4:00. Five credit hours. Tanner.

This course is designed to fulfill requirements for sanitary and pre-medical work. A study is made of the insect borne diseases of the world as now known.

Students will collect and study systematically the insect fauna of the Provo region. Prerequisite: Course 31.

- 34. Economic Entomology—Field, Orchard, and Garden Insects.** Spring. M. W. F., 10:00. Laboratory, M., 2:00-5:00. Three credit hours. Tanner.

A study of the principal injurious and beneficial insects of the field, orchard, and garden. Will include field, laboratory, and bibliographic work. Prerequisite: Course 30.

Upper Division Courses

- 61. Advanced Study of the Hymenoptera.** Autumn, Winter, Spring. Three credit hours. Time to be arranged.

A morphological and systematic study of the groups of western Hymenoptera in which the student may be interested.

- 62. Advanced Study of the Coleoptera.** Autumn, Winter, Spring. Three credit hours. Time to be arranged. Tanner.

Students may study the weevils or other Coleoptera from the systematic, morphological, or economic standpoint.

- 63. Arthropods of the Intermountain States.** Spring. M. W. F., 10:00. Three credit hours. Tanner.

A general course dealing with the morphology, physiology, and classification of the Arthropods of this region. An important course for all majors in Zoology.

- 64. Advanced Entomology.** Winter and Spring. Time and credit to be arranged.

Open only to advanced students who are prepared to do systematic, morphological, or economic work.

- 94. Principles of Nomenclature.** Winter. M., 4:00. One credit hour. Tanner.

A lecture course dealing with the principles of nomenclature and intended to meet the needs of students from any of the biological departments.

- 96. Special Problems in Entomology.** Winter and Spring. Two credit hours. Time to be arranged. Tanner.

Students will be encouraged to study the internal morphology of various groups of insects.

Graduate Courses

- 102, 103, 104. Special Problems in Systematic Entomology.** Time and credit to be arranged.

Studies in the structure and classification of certain groups of insects such as Coleoptera, Diptera, Hymenoptera, etc.

- 105, 106. Research Work In Insect Morphology.** Time and credit to be arranged.

Special emphasis will be placed upon the morphology of the beetles. However, students may choose any group for detailed study.

- 107, 108, 109. Special Problems in Economic Entomology.** Time and credit to be arranged.

The student is here given an opportunity to make a more or less detailed study of some insect or group of insects of economic importance. Students are encouraged to do considerable life history work.

- 110, 111, 112. History of Entomology.** A one-hour lecture or seminar course required of all graduate students. Time and credit to be arranged.

Extension Division

Home Study Faculty*

Howard S. McDonald, President.

Gerrit de Jong, Jr., Acting Director, Dean of College of Fine Arts, Languages.

Christen Jensen, History and Political Science.

Amos N. Merrill, Secondary Education.

Thomas L. Martin, Dean of College of Applied Science, Agronomy and Bacteriology.

M. Wilford Poulson, Psychology.

Vasco M. Tanner, Zoology and Entomology.

George H. Hansen, Geology and Geography.

Harrison V. Hoyt, Accounting.

Elmer Miller, Economics.

Milton Marshall, Physics, Mathematics.

A. C. Lambert, Dean of Summer School, Educational Administration.

Effie Warnick, Home Economics.

Hermese Peterson, Elementary Education.

Charles J. Hart, Physical Education.

Wayne B. Hales, Physics and Mathematics.

H. Grant Ivins, Animal Husbandry, Religion.

Bertrand F. Harrison, Botany.

Sidney B. Sperry, History, Religious Education.

Wesley P. Lloyd, Dean of Men, Philosophy of Education.

J. Wyley Sessions, Religious Education.

William H. Snell, Drawing.

Karl E. Young, English, Grammar.

Harold T. Christensen, Sociology.

Alonzo J. Morley, Speech.

Russel Swensen, Religious Education.

Edgar M. Jensen, Art.

Elsie C. Carroll, English Literature.

* This list includes only principal administrative officers and faculty members who teach courses offered in Home Study (correspondence). For Extension Classes, many more faculty members are available if sufficiently large groups ask for their services. Thus most of the courses taught in residence are available as Extension classes if demand justifies.

Irene S. Barlow, Home Economics.
Stella P. Rich, English.
W. Elmo Coffman, Geography.
Lynn Hayward, Zoology.
John R. Halliday, Music.
Ariel S. Ballif, Sociology.
John E. Hayes, Registrar.
Kiefer B. Sauls, Secretary-Treasurer.
Verla L. Birrell, Art.
Weldon J. Taylor, Accounting.
Ralph A. Britsch, English Composition.
Anna B. Hart, High School English.
George H. Smeath, Landscape Architecture.
Julia Caine, Social Science.
Lucile Spencer, Secretarial Practice.
Dean Peterson, Secretarial Practice.
Afton Hawker, Clerk.

Special Instructors

Mrs. Christen Jensen, English Literature.
J. F. Wakefield, Apiculture.
A. A. Anderson, Scouting.

Home Study Service

Since the organization of Brigham Young University Extension Division in 1921, formal instruction by home study and extension classes has been given to many thousands of individuals. Other thousands have received instruction through Leadership Institutes, including the annual Leadership Week of the University, and through lectures by members of the faculty, club programs, and other services.

The Extension Division offers correspondence work, among other services, to aid in enlarging the educational horizons of the many people who cannot take standard college work in residence. It is the desire of the Extension Division to assist anyone, anywhere, to continue his or her education.

Supervised individual instruction from highly-trained instructors has definite advantages to the correspondence student, but perhaps the greatest advantages come through the serious application and independent thinking the student must contribute to the completing of his course. His success in the

work depends largely upon his own initiative and eagerness for knowledge, and upon his personal standards of the quality of the work he is doing.

B. Y. U. Nationally Accredited

Brigham Young University, founded and endowed in 1875 by Brigham Young, is a standard American university. It is on the approved list of the Association of American Universities, Association of American Colleges, the American Council on Education, the Northwest Association of Secondary and Higher Schools, and the National Organization of Associated Women Students. The Extension Division is a member of the National University Extension Association and of the American Association for Adult Education.

Cost of Extension Work

The fee for any college course is \$2.50 per quarter hour, payable at the time of enrollment. The fee for a high school course is \$11.00.

The student must secure the required textbooks for any courses taken. They may be purchased from B. Y. U. Student Supply Association or ordered direct from the publisher.

Supplementary reference books are available at the Brigham Young University Library and may be borrowed for a period of two weeks. For this service address, The Librarian, Brigham Young University. On borrowed books, students pay postage both ways.

The Extension Division pays postage on material sent to the student. The student pays postage on material sent to the Extension Division.

Methods of Correspondence Instruction

With few exceptions, each home study course carries credit equivalent to the corresponding course in residence and therefore will cover the same amount of work. Most of the courses contemplate the student's doing about five assignments for each quarter hour of credit received.

After filing application for enrollment and paying the fee, the student is sent the assignments. He receives full instruc-

tions as to required reading and the preparing of his lessons, including questions to test his knowledge of the material.

When a lesson is completed, the papers are to be mailed to the Extension Division, Brigham Young University, Provo, Utah. The lessons are checked and graded by the designated instructor, and returned to the student.

Eligibility

A student may begin correspondence work (for credit) if he has met, or can meet, the entrance requirements of Brigham Young University as designated in the general catalogue, and if he is not regularly enrolled in residence work. (Students carrying residence work must have the signed approval of their dean, if they wish to enroll for correspondence classes.) A mature student may take correspondence work provided he can do the work satisfactorily, but the credit will not apply toward a degree until entrance requirements to the University are met. High school units of credit are available in some subjects, but enrollees (of high school age) must send with their applications a letter from the principal, stating the reasons why such credits should be earned in correspondence, and giving signed approval.

Regulations

1. A total of 45 hours may be earned in extension and correspondence classes, to apply toward the 186 required for graduation from this University.

2. No graduate credit can be earned in correspondence courses.

3. A student may begin at any time a course for which he is eligible, and should aim to complete the course within a year from the time he enrolls.

4. Students should distribute reports with approximate regularity throughout the period of study. Each assignment is intended to cover about a week's work (one hour per day).

5. Even with special permission a student may complete no more than four credit hours per month, by home study.

6. A student may not take correspondence or extension classes while doing residence work, without the consent of his

dean. Provided his total hours amount to more than sixteen, he must submit a petition to the petitions committee, for the extra credit.

7. A student who does not report either by lesson or by letter within a period of ninety days forfeits his right to further instruction in the course and will be allowed to take up the work again only upon payment of a \$2.50 reinstatement fee.

8. Unless otherwise stated, examinations are required in all courses before credit is given. These examinations must be supervised by a responsible school official. Where it is convenient, the examination should be taken at the Extension Division, Room 304, Brimhall Building, B. Y. U.

9. A transfer is possible from one course to another, if no work has been done, but after an enrollment is completed all fees are deposited with the treasurer and **NO REFUNDS WILL BE ALLOWED.**

10. Prompt responses by both students and instructors are expected, and are necessary for successful correspondence study. The Extension Division will appreciate receiving work at regular intervals and explanations for any necessary delays.

Other Extension Services

In addition to correspondence and extension classes, the Extension Division offers the following services:

1. **Visual Aids Service.** The Extension Division maintains a Bureau of Visual Instruction library of 16-millimeter sound and silent motion pictures, 35-millimeter film strips, and glass slides. Illustrative material for practically every course in the usual curriculum is available. During the 1944-45 school year approximately 35,000 students ranging from kindergarten to college grade regularly viewed educational pictures from the Bureau and many hundreds of others attended occasional showings. It is found that the proper use of visual aids in instruction leads to a measurable increase in learning. The above-mentioned aids may be borrowed by schools and other non-theatrical organizations. A catalog listing the materials available, rules under which they may be borrowed, and service fees, will be sent upon request.

2. **Leadership Institutes.** In addition to the general Leadership Week held each year at the University, members of the

faculty sometimes go into communities and hold local institutes. With the cooperation of the University, and of the L. D. S. stakes concerned, Leadership Weeks are now held annually in several other regions of the West.

3. Lyceum and Lecture Courses. Professional lyceum numbers in music, drama, and lecture are available at nominal charges. Where communities desire, they may secure a series of lectures by members of the faculty on a variety of subjects. A lecture course of eight or ten numbers is recommended to commercial clubs, school districts, and other civic or religious groups.

4. Free Lecture and Entertainment Service. Within reasonable distance from Provo, faculty members and student groups may be secured for the payment of expenses. High schools, ward organizations, civic clubs, and others have availed themselves of this opportunity in the past.

Home Study (Correspondence) Courses

Agronomy

- 41x. Soils. Three credit hours. Martin.
- 94x. History of Agriculture. Three credit hours. Martin.
- 99x. Agricultural Literature. Credit to be arranged. Martin.

Animal Husbandry

- 2x. History of Breeds of Livestock. Five credit hours. Ivins.
- 8x. Practical Poultry Farming. Three credit hours. Ivins.

Art

- 14x. Commercial Art. Two credit hours. Jenson.
- 15x. Commercial Art. Two credit hours. Jenson.
- 16x. Commercial Art. Two credit hours. Jenson.
- 41x. Normal Art. Three credit hours. Jenson.
- 52x, 53x. Art History and Appreciation. Two credit hours each unit. Birrell.

64x. Water Color Painting. Four credit hours. Jenson.

Bacteriology

21x. General Bacteriology. Three credit hours. Martin.

73x. Bacteriology and Sanitary Science. Three credit hours. Martin.

Botany

3x. Classification of Plants. Three to five credit hours. Harrison.

COMMERCE

Accounting and Business Administration

1x. Elementary Accounting. Five credit hours. Taylor.

2x. Elementary Accounting. Five credit hours. Taylor.

61x. Personnel Administration, Labor Problems. Three credit hours. Taylor.

64x. Business Psychology. Four credit hours. Poulsen.

75x. Principles of Statistics. Three credit hours. Hoyt.

Economics

1x. Introduction to Economics. Five credit hours. Miller.

14x. Economic and Financial History of the United States. Three credit hours. Miller.

61x. Labor Problems. Three credit hours.

93x. Economic History of Agriculture. Three credit hours. Martin.

Finance and Banking

14x. Economic and Financial History of the United States. (See Economics 14.)

Marketing

- 30x. Geography of Economic Products. (See Geography 6.) Coffman.
- 58x. Principles of Merchandising. Four credit hours. Taylor.

Secretarial Practice

- 11x, 12x. Shorthand. Four credit hours each course. Spencer.
- 57x. Business Correspondence. Three credit hours. Peterson.

Drawing

- 3x. Drawing. Two credit hours. Snell.
- 4x. Drawing. Two credit hours. Snell.
- 5x. Drawing. Two credit hours. Snell. Prerequisite: 4.
- 10x. Perspective Drawing. Two credit hours. Snell.
- 13x. Architectural Drawing. Two credit hours. Snell. Prerequisites: 4, 5.
- 14x. Architectural Drawing. Two credit hours. Snell. Prerequisite: 13.
- 15x. Architectural Drawing. Two credit hours. Snell. Prerequisites: 13, 14.

EDUCATION

- 50x. (Secondary or Elementary) Principles of Education. Four credit hours. Lloyd.
- 57x. Safety Education. Two credit hours. Hart.

Educational Administration

- 90x. Youth and Its Leadership. Five credit hours. Lambert.
- 93x. Organization and Administration of Public Schools. Three credit hours. Lambert.

Elementary Education

- 50x. Principles of Education. Four credit hours. Lloyd.
- 58x. Hygiene and Sanitation. Three credit hours. Hayward.

Philosophy of Education

- 51x. History of Education. Three credit hours. Lloyd.
74x. Rural Sociology. (See Sociology 53). Three credit hours. Ballif.
87x. Methods in Character Education. Four credit hours. Lloyd.

Secondary Education

- 50x. Principles of Education. Four credit hours. Lloyd.
94x. Educational Guidance and Personnel. Three credit hours. Merrill.
97x. Articulation of School Units. Three credit hours. Merrill.

English

- 1x. Composition and Literature. Three credit hours. Britsch.
2x. Composition and Literature. Three credit hours. Britsch.
3x. Composition and Literature. Continuation of Course 2. Britsch.
11x. Advanced English Grammar. Four credit hours. Young.
16x, 17x, 18x. American Literature. Six credit hours. Mrs. Christen Jensen.
20x, 21x, 22x. Masterpieces of English Literature. Two credit hours each course. Carroll.
21x, 22x, 23x. Survey of English Literature. Three credit hours each course. Mrs. Jensen.
50x, 51x, 52x. Readings in World Literature. Two credit hours each course. Mrs. Jensen.
53x, 54x, 55x. Readings in World Literature. Two credit hours each course. Mrs. Jensen.
58. The Modern Short Story. Three credit hours. Mrs. Jensen.
63x. Modern American Drama. Three credit hours. Rich.

64x. World Literature for Children. Five credit hours. Mrs. Jensen.

69x. Literature of the English Bible. Three or six credit hours. Mrs. Jensen.

Geology and Geography

1x. Survey Course. Four credit hours. Hansen.

16x. Descriptive Astronomy. Four credit hours. Hales. (See Physics 16.)

21x. Weather and Climate. Five credit hours. Hales. (See Physics 21.)

22x. Introductory Geography. Five credit hours. Coffman.

23x. Geography of Economic Products. Five credit hours. Coffman.

52x. Human Geography. Three credit hours. Hansen.

70x. Political Geography. Five credit hours. Coffman.

History

1x. History of Civilization. Five credit hours.

20x, 21x, 22x. American History. Three credit hours each course. Jensen.

51x. Greek History. Three credit hours. Sperry.

71x, 72x, 73x. History of Modern Europe. Three credit hours each course.

82x. History of the West. Five credit hours.

Home Economics

10x. Elementary Nutrition. Two credit hours. Barlow.

80x. Household Administration. Three credit hours. Warnick.

Landscape Architecture

15x. Theory and Practice of Landscape Architecture. Three credit hours. Smeath.

Mathematics

- 11x. College Algebra. Five credit hours. Marshall.
12x. Plane and Spherical Trigonometry. Five credit hours.
Marshall.
49x. Analytic Geometry. Five credit hours. Hales.
50x. Differential Calculus. Four credit hours. Hales.
51x. Integral Calculus. Four credit hours. Hales.

Music

- 81x, 82x, 83x. History of Music. Three credit hours each course.
Halliday.

Physics

- 16x. Descriptive Astronomy. Four credit hours. Hales.
21x. Meteorology. Five credit hours. Hales.

Political Science

- 10x. U. S. Constitution. Three credit hours. Jensen.

Psychology

- 10x. Study Habits and Mental Hygiene. Two credit hours.
Poulson.
11x. General Psychology. Five credit hours. Poulson.
64x. Applied Psychology. Four credit hours. Poulson.
74x. Advanced Educational Psychology. Four credit hours.
Poulson. Prerequisite: three hours of elementary Psychology.

Religion

- 3x. Church History. Two credit hours. Clark.
19x. Doctrine and Missionary Methods. Two credit hours.
Ivins.
20x. History of Religious Propaganda. Two credit hours.
Ivins.

- 56x. Message of the Twelve Prophets. Two credit hours. Sperry.
- 61x. Life and Letters of Paul. Two credit hours. Sessions.
- 62x. Life of Jesus. Two credit hours. Swensen.
- 77x, 78x, 79x. Scout Leadership. Two credit hours each course. Anderson.

Sociology

- 11x, 12x, or 55x, 56x. Elementary Principles of Sociology. Three credit hours each course. Ballif.
- 51x. Community Organization and Leadership. Three credit hours. Ballif.
- 53x. Rural Sociology. Three credit hours. Christensen.
- 57x. Population Problems. Three credit hours. Christensen.
- 75x. Marriage and the Family. Three credit hours. Christensen.
- 93x. Race and Racial Problems. Two credit hours. Ballif.

Speech

- 95x. Speech Correction. Three credit hours. Morley.

Zoology and Entomology

- 32x. Insect Classification. Credit to be arranged. Tanner.
- 33x. Apiculture. Three credit hours. Wakefield.
- 58x. Health Education. Three credit hours. Hayward.
- 75x. History of Zoology. Two credit hours. Tanner.
- 79x. Eugenics. Three credit hours. Tanner.
- 91x. Field Zoology. Credit to be arranged. Tanner.

HIGH SCHOOL COURSES

English

- d. A Study of the Types of Literature. One unit credit. Hart.

Geography

- a. Economic Geography.** One unit credit. Coffman.

History

- a. U. S. History.** One unit credit. Caine.

Mathematics

- a. High School Algebra.** One unit credit. Marshall.
b. Plane Geometry. One unit credit. Coffman.
c. Second Course in Algebra. One unit credit. Marshall.

Social Science

- a. Problems in Democracy.** One unit credit. Caine.

Training Schools

Howard S. McDonald, President.

Supervisors

Amos N. Merrill, Secondary Training.
G. L. Woolf, Secondary Training.
Hermese Peterson, Elementary Training.
Reuben D. Law, Elementary Training.

Secondary School Faculty

G. L. Woolf, Principal.
A. John Clarke, Mathematics and Science.
C. Lavoir Jensen, Mathematics.
Anna B. Hart, English, Theology.
Wilford D. Lee, English, Theology.
Lorin C. Bryner, Chemistry.
Morris Clinger, Speech.
Julia A. Caine, Social Science.
LeRoy Sparks, Office Practice.
David Crowton, Physical Education, Coach.
Catherine B. Hall, Physical Education.
William F. Hanson, Music.
Verla Birrell, Art.
Roman Andrus, Art.
William H. Snell, Shop Work and Mechanical Drawing.
Louis Booth, French, Spanish, and Orchestra.
Dortha Reid, Home Economics.
Elliott Tuttle, Geography and Biology.

Elementary School Faculty

Hermese Peterson, Principal.
Reuben D. Law, Supervisor of Practice Teaching.

Supervisory Teachers

Georgia Maeser
Gladys Kotter
May C. Haymond
Lorna Call
Flora Fisher
Josephine M. Strong
Lillian C. Booth
George L. Miller
G. W. McAllister, Music.

Organization and Purpose

The Training Schools are organized on a kindergarten 6-3-3 basis; viz., a kindergarten, an elementary division, a junior and senior high school.

Students enrolled in the training schools have all the advantages of the University plant such as the use of the libraries, gymnasiums, laboratories, shops, athletic fields, auditorium, etc. These enlarged opportunities, with the advantages of expert teachers, make the training schools especially attractive and advantageous to students of elementary and high school age.

Provisions are made for promotions from grade to grade and from one division to another so that pupils may enter either the kindergarten or the first grade and remain in continuous attendance until they are graduated from one of the colleges of the University. The educational welfare of the students is safeguarded by an enriched curriculum. In addition, provisions are made for moral and religious training every year the student is in attendance.

ELEMENTARY TRAINING SCHOOL

The elementary training school covers the range from the kindergarten through the first six grades.

The enrollment in this department is limited to the number of pupils who can be adequately cared for in each grade. Priority of application is the basis upon which students are enrolled.

A staff of especially well-qualified instructors, with the facilities offered by the University and the assistance given by student teachers and special instructors provides wide range of experience for the children. Much attention is given to individual needs and interests and to the development of special abilities. The aim is to exhibit as completely as possible a pattern of modern progressive school in action.

This department serves as a laboratory in modern school practice for the training of student teachers in the field of elementary education, and for the testing of current educational theory.

JUNIOR HIGH SCHOOL

Pupils completing the first six grades are regularly promoted to the **Junior High School**. Here departmentalization begins, permitting of variation in courses and a wide range of contact with expert instructors. Entrance to the Senior High School is based upon the completion of the courses outlined for the Junior High School. A maximum of four units plus one year of Theology credit will be allowed for ninth year work to count toward filling group requirements and toward graduation from the Senior High School for those pupils coming from schools which do not maintain a Junior High School.

SENIOR HIGH SCHOOL

Students completing the three years of work prescribed for the Junior High School are admitted to the Senior High School.

Students graduating from the Senior High School will be expected to complete 16 units in three years. Equal credit will be given in all subjects for equal amounts of time spent in the classroom. A course followed for thirty-six weeks with classes meeting five times a week will give one unit. All the constants prescribed must be included in the program of each student.

Aims and Regulations

It is the purpose of the high school to develop in its students, habits of regularity, punctuality, and industry. Willing and serious application to the tasks at hand is considered of fundamental importance in meeting life situations. It is the aim of the school to have students work vigorously during the day in order to develop the above qualities and to minimize home preparation of lessons. To achieve these aims, the following regulations apply to those enrolled:

(1) Students are accountable to the school for all their time during the school day, except the noon hour, from 9:30 A. M. until 4:30 P. M., provided no classes are held after that time. Permission should be obtained from the principal and teachers in case students are required to leave the school at any time during the day. Such permission should be

obtained prior to departure. Attendance at study sessions is as obligatory upon the student as are class recitations.

(2) All students are required to register for Theology. Students who fail continually to do satisfactory work in their courses in any department will not be permitted to remain in classes.

(3) Students are required to take the regulation courses in physical education during residence at this school. Students are released from this requirement only upon statement of physical disability signed by a competent physician. Satisfactory grades in physical education courses are required for graduation.

High School Activities

Under the direction of the faculty and the student body organization, an adequate program of athletic and social activities is provided for the junior and senior high school students.

All high school groups have regular social gatherings and recreational activities under faculty supervision and guidance. They have competitive activities in athletics, debating and public speaking, and essay writing. Each year the school produces a dramatic or a musical program. The school is a member of the State High School Debating Association and the Utah High School Activities Association. In addition to these opportunities for extra-curricular activity, a regular High School Student Body organization is maintained with the various activities that naturally are sponsored by such organizations. The high school students have also the advantage of participation in the regular activities of the University student body life.

Credit

Those classes which meet five days each week for full fifty minutes, and which continue for the full school year of 36 weeks of actual class work carry one unit of credit. In some cases students may transfer nine hours college credit for one unit of high school credit.

Students who register late or who discontinue before the end of the school year or miss a portion of their work during the school year can receive no higher grade than "Incomplete" until the required work of the course is completed. An incom-

plete grade carries no credit. Such a grade may be removed within one year and credit received.

SECONDARY TRAINING SCHOOL CURRICULA

Junior High School

7th Grade

Subjects

Constants: Religion, Physical Education, English I, Geography, Mathematics I, Music, Reading, Homemaking, Study Periods, and Assembly.

Electives: Art, Orchestra.

8th Grade

Subjects

Constants: Religion, Physical Education, English II, General Science, History, Mathematics II, Music, Reading, Study Periods, and Assembly.

Electives: Art, Orchestra.

9th Grade

Subjects

Constants: Art, Religion, Physical Education, English, Biology, Community Civics, and Assembly.

Electives: Chorus, Homemaking, Orchestra, Shop, and Theory of Music.

Senior High School

Students desiring to graduate from the B. Y. U. High School and to qualify for college entrance at the same time, are required to register for the following courses:

Grade X. English B, Theology B, Physical Education.

Grade XI. English C*, Theology C, Physical Education.

Grade XII. Problems in U. S. History, Theology D, Physical Education.

* Under special conditions approved by the principal, English D may be substituted for English C.

Some time during the senior high school years the following courses must be taken: Algebra or Geometry, Problems of Democracy or European History, Physics or Chemistry, Geography or Aeronautics, Physiology and Eugenics, two years of gym work.

Special courses may be planned for those high school students who do not intend to be officially graduated from high school or who do not intend to go to college.

Senior High School Courses

Subject	Days		Year Taken	Credit
Art	5	Elective	10 to 12	1 unit
Business				
Accounting, Elem.	5	Elective	10 to 12	1 unit
Accounting, Adv.	5	Elective	11 to 12	1 unit
Shorthand	5	Elective	11 to 12	1 unit
Typewriting, Elem.	5	Elective	10 to 12	1 unit
Typewriting, Adv.	5	Elective	10 to 12	1 unit
English				
Composition, Literature and Grammar	5	Constant	11	1 unit
Grammar and Literature	5	Constant	10	1 unit
Literature	5	Elective	10 to 12	1 unit
Home Economics				
Dressmaking, 2nd Sem.	5	Elective	10 to 12	.5 unit
Homemaking	5	Elective	10 to 12	1 unit
Language				
French A or B	5	Elective	10 to 12	1 unit
Latin A	5	Elective	10 to 12	1 unit
German A or B	5	Elective	10 to 12	1 unit
Mathematics				
Algebra I*	5	Elective	10 to 12	1 unit
Geometry*	5	Elective	10 to 12	1 unit
Arithmetic (Bus.)	5	Elective	10 to 12	1 unit
Trigonometry	5	Elective	10 to 12	1 unit

* These subjects are only partially elective as either one or the other in each group must be taken.

Subject	Days		Year Taken	Credit
Music				
Chorus	2	Elective	10 to 12	.4 unit
Orchestra	3	Elective	10 to 12	.6 unit
Theory of Music	3	Elective	10 to 12	.6 unit
Physical Education				
Physical Ed. (Girls)		Constant	10 to 12	.4 unit
Physical Ed. (Boys)		Constant	10 to 12	.4 unit
Religious Education				
Theology B	2	Constant	10	.4 unit
Theology C	2	Constant	11	.4 unit
Theology D	2	Constant	12	.4 unit
Assembly	1	Constant	10 to 12	.2 unit
Science				
Physics*	5	Elective	11 to 12	1 unit
Physiology (1 sem.)	5	Constant	11 to 12	.5 unit
Eugenics (1 sem.)	5	Constant	11 to 12	.5 unit
Chemistry*	5	Elective	11 to 12	1 unit
Botany (1 sem.)	5	Elective	10 to 12	.5 unit
Zoology (1 sem.)	5	Elective	10 to 12	.5 unit
Aeronautics*	5	Elective	11 to 12	1 unit
Shop				
Auto Mechanics	5	Elective	10 to 12	1 unit
Drafting A or B	5	Elective	10 to 12	1 unit
Woodworking A or B	5	Elective	10 to 12	1 unit
Social Science				
U. S. History	5	Elective	10 to 12	1 unit
World History*	5	Elective	10 to 12	1 unit
Problems in American Democracy*	5	Constant	10 to 12	1 unit
Geography*	5	Elective	10 to 12	1 unit
Dramatic Art	5	Elective	10 to 12	1 unit
Public Speaking	5	Elective	10 to 12	1 unit

* These subjects are only partially elective as either one or the other in each group must be taken.

Graduates, 1944-45

MASTER DEGREES

Master of Arts

Galway, Desma Hall..... Provo

A. B. Degree, Brigham Young University, 1938.

Major: Botany.

Thesis: The North American Species of Smilacina.

Pearce, Wesley Provo.

A. B. Degree, Brigham Young University, 1929.

Major: Theory of Music.

Thesis: Intonation and Factors Influencing its Attainment.

Master of Science

Crandall, Lars G. Provo.

B. S. Degree, Brigham Young University, 1944.

Major: Accounting and Business Administration.

Thesis: An Experimental Determination of the Merits of
Two Methods of Studying Shorthand. Reading as
against Writing Shorthand Outlines.

Wallace, Karl M.

B. S. Degree, Brigham Young University, 1942.

Major: Sociology.

Thesis: Eminent Utah Men, a Comparative Study of Certain Aspects of Their Backgrounds and Religious Beliefs.

COLLEGE OF APPLIED SCIENCE

Bachelor of Arts

Hatanaka, Kameko	McGehee, Arkansas.
Kawaguchi, Miharu	Heart Mountain, Wyoming
Woolf, Lois	Provo

Bachelor of Science

Abbott, Helen	Yeadon, Pennsylvania
Cox, Jean	Provo
Gardner, R. Gerber	American Fork
Hoshimiya, Dave Nobto	Salt Lake City
Hunter, Wilma Gwendla	Idaho Falls, Idaho
Johnson, Margie	Glenns Ferry, Idaho
Klingler, Ruth Odette	Rexburg, Idaho
Martin, Helen	Provo
Moore, Orpha	Spanish Fork
Nielsen, Marjorie Helen	Idaho Falls, Idaho
Paul, Beth	Ogden
Shiozawa, Helen T. Shiratori	Provo
Stinson, Thelma Grace	Phoenix, Arizona
Westenskow, Marian Lois	Union, Oregon
Whiting, Ray Sullivan	Springville
Wilson, Ruth	Payson

COLLEGE OF ARTS AND SCIENCES

Bachelor of Arts

Angel, Clifford Eugene	Danville, Virginia
Chatterton, Roylance Wayne	Preston, Idaho
Hillman, Helen Mae	Thornton, Idaho
Horsley, A. Burt	Brigham City
Jackson, Yvonne	Toquerville
Marshall, Robert Taylor	Provo
Sander, Mary Elizabeth	Heber City
Waterstradt, Jean Anne	Ogden
Wilson, Gertrude Elizabeth	Kirtland, New Mexico
Woodger, Edward Winston	Magrath, Alberta, Canada

Bachelor of Science

Black, Val Gene	Delta
Christensen, Herbert K.	Springdale
Clark, Stephen Hone	Provo

Francis, Paul Edwin	Santa Ana, California
Hansen, A. Kelsch	Richfield
Hartshorn, Robert Jr.	American Fork
Hatch, Dorothy Goates	Provo
James, Rachel Barlow	Provo
Killpack, Merlin Leo	Provo
Madsen, Carlos N.	Provo
Parker, Reed Julian	American Fork
Purrington, Wealthy Elizabeth	Ogden
Skinner Mary Jean	Orem
Snow, Dorothy	Santa Monica, California
Taylor, Barbara	American Fork
Uyeda, George K.	Provo
Van Alstyne, Alvin Guy	Hollywood, California

COLLEGE OF COMMERCE

Bachelor of Science

Fujie, Asa Arthur	Topaz
Jones, Dale D.	Falls City, Nebraska
Lowe, Howard D.	Orem
Magota, Toshi	Hanford, California
McMurray, Yvonne	Oakley, Idaho
Nicholes, Florence Elaine	American Fork
Richardson, Iris	Nephi
Robins, Harold David	Kaysville
Robinson, Phileon B. Jr.	Boise, Idaho
Roundy, Golda	Palmyra, New York
Stucki, Anna	Rexburg, Idaho
Walker, John Rankin	American Fork
Welling, Horace Neil	Farmington

COLLEGE OF EDUCATION

Bachelor of Arts

Chambers, Wm. J.	Eden
Hansen, Julia Helen	Centerfield
Hunter, Nona Rae Stanton	Grace, Idaho
Jaramillo, Anita Marie	Vallecitos, New Mexico
Jenson, Beverly	Provo

Bachelor of Science

Anderson, Vila Evelyn	Richfield
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Bearnson, Bertha W.	Spanish Fork
Chapman, Helen J.	Provo
Christensen, Adella	Ontario, Oregon
Dennett, Boyd	St. George
Dixon, Louise	Ogden
Dunn Lono J.	Richfield
Frisby, Stella Orlene	Salt Lake City
Gardner, Gladys	Murray
Gavoille, Melba L.	Ogden
Grange, Morinda	Midvale
Hale, Verla	Ogden
Hicken, Mima Broadbent	Heber City
Hogan, Lydia Peterson	Provo
Hogge, Ethel	Eden
Houston, Dorothy Ward	Panguitch
Huber, Matilda	Provo
Jensen, Ruth Elaine	Fairview
Jones, Dorothea Irene	Douglaston, New York
Jorgensen, Vivian	American Fork
Koyle, Wells Freeman	Burley, Idaho
Liston, Mildred	Escalante
Loveridge, Thomas LeRoy	Lehi
Lund, Ella Oriole	Evanston Wyoming
March, Lawrence Bradshaw	Murray
Martineau, Florence	Logan
Mortensen, Elizabeth Hutchings	American Fork
Myers, Leah D.	Los Angeles, California
Nielson, Faughn	Price
Nielsen, Vernon Kofoed	Provo
Noble, Vivienne	Smithfield
Orr, Robert Wesley	Pocatello, Idaho
Parkinson, Ella Jean	Milford
Probst, Mae	Salt Lake City
Ramey, Henry Frederick	Riggins, Idaho
Ransbottam, Adele	Prescon, Idaho
Richards, Kathryn Ann	Malad, Idaho
Salisbury, Nelda Ann	Nephi
Sandstrom, Alonzo	Eureka
Smithson, Ida Allen	Fillmore
Snarr, Thelma	Murray
Snow, Orval L.	Provo
Stahle, Melba Lillie	Park City
Steckle Ward Allan	Calgary, Alberta, Canada
Strong, Josephine M.	Provo
Viklund, Hanna	Spanish Fork
Washburn, Vela	Blanding
Wicken, Louise	Trinidad, Colorado

Wilde, Leland	Roosevelt
Williams, Russell S.	Price
Winn, Eden Lorus	Kenilworth
Wood, Bette Jayne	Provo
Woodward, Jean Cherizade	Ogden
Woolf, Katherine Kirk	Pleasant Grove

COLLEGE OF FINE ARTS

Bachelor of Arts

Bean, Beverly Anne	Seattle, Washington
Burgon, Helen Mabey	Midvale
Call, Rhoda Vaun	Pocatello, Idaho
Fuller, Irene	Barnwell, Alberta, Canada
Jones, Valena	Springville
Lefler, Ardath Louise	Price
Luke, Lois Hunter	Cedar City
McNulty, Elizabeth Lund	Mt. Pleasant
Paxman, Doressa	Provo
Stowell, Elaine	Rexburg, Idaho
Tsuchiya, Janet	Amache, Colorado
Turner, Roma Jeane	Morgan

Bachelor of Science

Bunnell, Carol Roberts	Salt Lake City
Clayson, Beth	Provo
Keeler, Virginia C.	Provo
Lovell, Florence Lindsay	Provo
Sandberg, Lucille	Salt Lake City
Swalberg, Joy Maranda	Spanish Fork
Sylvester, Gwen	Hurricane
Whiteley, Mary	Oakley, Idaho

GRADUATES WITH HIGH HONORS

Christensen, Adella	Purrington, Wealthy Elizabeth
Christensen, Herbert K.	Richards, Kathryn Ann
Cox, Jean	Robins, Harold David
Hanson, Julia Helen	Sander, Mary Elizabeth
Horsley, A. Burt	Shiozawa, Helen T. Shiratori
Jackson, Yvonne	Stucki, Anna
Jensen, Beverly	Sylvester, Gwen
Kawaguchi, Miharū	Turner, Roma Jeane
Lowe, Howard D.	Waterstradt, Jean Anne
Marshall, Robert Taylor	Westenskow, Marian Lois
Moore, Orpha	Wilson, Ruth
Nicholes, Florence Elaine	Woolf, Lois

GRADUATES WITH HONORS

Burton, Helen Mabey	Kæler, Virginia C.
Call, Rhoda Vaun	Noble, Vivienne
Dunn, Lono J.	Swalberg, Joy Maranda
Hartshorn, Robert Jr.	Walker, John Rankin

Enrollment of Students

1944-1945

In the following list "a" stands for arts and science; "ap" for applied science; "c" for commerce; "e" for education; "fa" for fine arts; "G" for graduate; "ss" for summer school; "S" for senior; "J" for junior; "So" for sophomore; "F" for freshman; "Unm" for unmatriculated; and "Sp" for special.

Abbott, Helen ap-S	Anderson, Betty Marie, fa-F
..... Yeadon, Penn.	..... Salt Lake City
Adams, Arza Paul, a-F.....	Anderson, Clara, ap-So, Emery
..... Pleasant Grove	Anderson, Darlene, a-F.....
Adams, Carma, c-So ....Provo	..... Salt Lake City
Adams, Deaun, ap-F..Blanding	Anderson, Dean E., ap-F..
Adams, Garda G., e-Sp.....	..... Oak City
..... Blanding	Anderson, DeVon, G ....Manti
Adams, Georganna, e-So, Delta	Anderson, Elaine, a-J..Ogden
Adams, Zoe ss, Pleasant Grove	Anderson, Ellen W., fa-S....
Adamson, Nellie C., e-Sp ....	..... Springville
..... Heber City	Anderson, Evelyn, e-S, Richfield
Addy, George Milton, a-F.....	Anderson, Evelyn Merle, c-
..... Bingham Canyon	Unm ....Green River, Wyo.
Aiken, Evan, fa-S.....Provo	Anderson, Gwen, ss....Monroe
Airmet, Elliott LeRoy, a-So..	Anderson, Helen C., a-F.....
..... Provo	..... Spanish Fork
Akers, Iris Aileen, c-F.....	Anderson, Howard Fairbanks
..... Yakima, Wash.	a-F .....Burbank, Calif.
Albrecht, Reva, ss, Minersville	Anderson, James Moyle, c-J..
Aldrich, Marian G., c-So....	..... Ephraim
..... Mt. Pleasant	Anderson, Jean, fa-So-ss....
Alexander, Reta, ss, Panquitch	..... Pleasant Grove
Allen, Mrs. Ellen Y....Provo	Anderson, John Emmert, a-F
Allen, Lloyd V., ap-Sp..Ogden	..... Burley, Ida.
Allen, Marilyn Murphy, a-F	Anderson, Margaret, ap-Unm
..... Glendale, Calif.	..... Palmyra, N. Y.
Allen, Mona, fa-Unm.....	Anderson, Marjorie, e-So....
..... Burley, Idaho	..... Riverton
Allen, V. Elayn, fa-So.....	Anderson, Nona Gertrude, fa-
..... Nampa, Idaho	F Mesa, Ariz.
Allred, Arcilee Bae, ap-J....	Anderson, Phyllis Nielson, a-
..... Mt. Pleasant	F Oak City
Allred, Bertha Janis.....	Anderson, Reese, G, Springville
..... McGill, Nev.	Anderson, Rita, a-F.....Provo
Allred, Beth Brinton	Anderson, Robert F., ss.....
..... Mt Pleasant	..... Salt Lake City
Allred, Darrell J., a-F....Lehi	Anderson, Ruby Baird, ss, Provo
Allred, Edna G., e-F	Anderson, Thiele, e-F.....
..... Fountain Green	..... Oak City
Allred, Elaine, a-F..... Provo	Anderson, Woodruff H., G..
Allred, Inez B., ss.....Provo	..... Springville
Allred, Izetta M., ss..Fremont	Anderson, Zola, e-Ep-ss....
Allred, Ralph J., a-Sp....Lehi	..... Oak City
Andelin, Shirley, c-So.....	Andrew, Cathryn, fa-Sp, Provo
..... Idaho Falls, Ida.	

- Andrew, Douglas Barton, a-F Detroit, Mich.
 Andrew, Lois Emily, c-So... .. Eureka
 Andrus, Beulah Leona, ss... .. Ucon, Ida.
 Andrus, Inez Luella, ss.... .. Ucon, Ida.
 Andrus, J. Roman, G-ss, Provo
 Arave, Louise Marie, ap-Unm Hooper
 Arave, Margaret, ss..Hooper
 Armour, Wanda Mae, e-F, Provo
 Armstrong, Anna Jean, ss... .. Cedar City
 Armstrong, Gay Norine, e-So Idaho Falls, Ida.
 Ashpole, Pauline, a-F..... .. Medford, Ore.
 Ashworth, Ellen, a-So., Provo
 Astin, Marion Emma, e-F.... .. Chicago, Ill.
 Atkerson, Mary Lee, c-So... .. Dallas, Texas
 Atkinson, Elva Idell, e-So-ss Evanston, Wyo.
 Atkinson, Theron H., ss.... .. Rigby, Ida.
 Atwood, Lyle Beth, ap-So... .. Pleasant Grove
 Ault, Louis Owen, e-F..... .. Cedar Valley
 Ault, Virginia, c-So..... .. Cedar Valley
 Austin, Elida, c-Unm.. Provo
 Avery, Chadwick Floyd, c-J-ss Provo
 Ayers, Alama, e-So-ss..... .. Waihee, Maui, T. H.
 Babbell, Nadine Gleason, ss. Provo
 Babbel, O'lea Mae, ap-J-ss... .. Twin Falls, Ida.
 Babbel, Pearl A., ap-F..... .. Twin Falls, Ida.
 Babbel, Vera L., ap-So Twin Falls, Ida.
 Baca, Jack A., a-So..... .. Oakland, Calif.
 Bagley, Maida ss Provo
 Bagley, Melva, ss., Koosharem
 Bailey, Ann C., fa-F....Nephi
 Bailey, Annette, a-F..... .. Salt Lake City
 Bailey, Barbara Carolyn, ap-So. Salt Lake City
 Bailey, Betty Jean, e-F..... .. Azusa, Calif.
 Bailey, Bryce Reed, e-So, Nephi
 Bailey, Maynard C., c-S, Nephi
 Baird, Alma Parker, a-F... .. Draper
 Baird, Dorothy Maxine, c-J Salt Lake City
 Baird, V. Lucille, ap-F..... .. Salt Lake City
 Baker, Hannah, a-Sp-ss, Provo
 Baker, Vonda Lillie, a-F..... .. Boulder
 Ball, Wilburn N., G Provo
 Ballard, Nadine, c-F..... .. Snowflake, Ariz.
 Ballard, Orval Thomas, a-Unm Orem
 Ballard, Rebecca Laurine, e-So. Seattle, Wash.
 Ballif, Ariel Smith Jr., a-F Provo
 Ballif, Arta Romney, ss, Provo
 Ballif, Carma, ss..... Provo
 Bamgartner, Lula Belle, e-F Provo
 Bandle, Dorinne, ap-So..... .. Salt Lake City
 Bangerter, Elsbeth, a-F..... .. Salt Lake City
 Bangerter, M. Gleneth, a-F Salt Lake City
 Barber, Romaine, ap-J..... .. Denver, Colo.
 Barber, Webb, ss....Hurricane
 Barclay, Janet Fannie, ap-So Paul, Ida.
 Barkdull, Lucille, ap-F..... .. American Falls, Ida.
 Barkdull, Van Ese, fa-So.... .. American Falls, Ida.
 Barker, Mildred Morgan, fa-Sp. Provo
 Barlocker, Katie, e-J..... .. Enterprise
 Barlow, Loren Call, ss, Provo
 Barlow, Marjorie A., ap-F... .. Bountiful
 Barlow, Minnie, ss Salt Lake City
 Barnes, Phyllis S., fa-So.... .. Long Beach, Calif.
 Barney, Orvin Pat, a-So-ss... .. Delta
 Barnum, Helen Jane, a-Unm La..Canada, Calif.
 Barrett, Ivan J. ss..Hurricane
 Barrett, Larence James, a-J Malta, Ida.
 Bartholomew, Henry Homer, ss Fayette
 Bartlett, William H., ss, Sandy
 Barton, Asenath Avery, c-So. Provo

- Barton, LaRue, ssMidvale
 Barton, Marie Musig, ss....
 Mt. Pleasant
 Bateman, Gwen, c-F....Alpine
 Bates, Velma, a-S, Mesa, Ariz.
 Bauer, Edith Bartholomew,
 G-ssPayson
 Bauer, Virginia W., ss.....
 Cedar City
 Bautista, Margarita, e-F ...
 Colonia Dublan, Chih., Mex.
 Baxter, Janet, c-F, Spring City
 Bayles, Margaret, a-Umn...
 Blanding
 Bayles, Marian, a-F..Blanding
 Beal, Irene, a-F...Moore, Ida.
 Bean, Beverly A., fa-S.....
 Seattle, Wash.
 Bean, Donna Myrle, a-F, Provo
 Bean, Dorothy, Fa-So.....
 Salt Lake City
 Gean, Philip Coleman, A-F..
 Berkeley, Calif.
 Bean, Dorothy, fa-So.....
 Salt Lake City
 Bean, Philip Coleman, a-F..
 Berkeley, Calif.
 Beardall, Anna, G, Springville
 Bearnson, Bertha W., e-Sp..
 Spanish Fork
 Beatty, Florence, e-J, Hurricane
 Bechtol, Elizabeth E., ss.....
 Eureka
 Beck, Barbara Mae, fa-F....
 Burbank, Calif.
 Beck, Carol, a-F.....Provo
 Beck, Jenna Vee, fa-F.....
 American Fork
 Beck, Willda Maycock, ss...
 Draper
 Beckman, Melba Marie, ap-J
 Provo
 Beckstead, J. Roscoe, ss....
 Tremonton
 Beebe, Arla B., fa-So.. Provo
 Bell, Beula, a-F..Preston, Ida.
 Belliston, Mary Bywater, ss
 Nephi
 Belliston, Mima Jean, e-F,..
 Nephi
 Bellows, Dean H., c-F.....
 Spanish Fork
 Belnap, Bryan West, e-J, Ogden
 Bench, Reid Devone, ap-F
 Orem
 Bennett, Beth Marie, ap-F..
 Provo
 Bennett, Elaine, ssProvo
 Bennett, Emma, c-So, Holden
 Bennion, Shirley Nadine, c-So
 Picture Butte, Alberta, Can.
- Bentwet, Edna H., a-Sp, Provo
 Berkheimer, George Rea, a-F
 Provo
 Berlin, Mildred M., ss.....
 Backfoot, Ida.
 Bernards, Hilda, ss....Ogden
 Berrett, Eleanore May, fa-F
 Ogden
 Berrett, Shirley, c-So
 Springville
 Berry, June Evangeline, e-
 So. Mill Valley, Calif.
 Beutler, Barbara, a-F, Richfield
 Biddinger, Russell Lee, a-F
 Manassa, Colo.
 Bingham, Afton Mae, e-F....
 Roosevelt
 Bingham, Owen W., G-ss, Provo
 Bird, Beverly, fa-F, Springville
 Bird, Josephine Snow, a-Sp..
 Provo
 Bird, Kathleen N., fa-J.....
 San Diego, Calif.
 Bird, Leora C., c-J....Manti
 Bird, Martha, G....Springville
 Bird, Virginia, c-F...Mapleton
 Birrell, Verla, GProvo
 Bjeregaard, Oscar, G....Provo
 Black, Calvin Ardell, a-F...
 Deseret
 Black, Maurice Dean, a-Unm
 Provo
 Black, Val Gene, a-Sp.....
 Richmond
 Black, Verle Dee, a-J, Deseret
 Blacker, Marie H., ss, Murray
 Blaylock, Mrs. Bonne, a-Sp
 Provo
 Bliss, Mary Renee, c-F...Orem
 Bluth, Dewey Clyne, a-J....
 El Paso, Tex.
 Bluth, Ione, fa-F, El Paso, Tex.
 Bodily, Ruth, c-F, Burley, Ida.
 Bodmer, Myrle Lucille, ap-
 UnmSan Diego, Calif.
 Bond, Merla, c-J....Duchesne
 Bond, Twila Mae, c-F.....
 Shlprock, N. M.
 Booth, Editha, a-Sp....Provo
 Booth, Lillian Clayton, G-ss
 Provo
 Booth, Lillian Lucille, a-So
 Provo
 Booth, Marguerite J. ap-Sp..
 Provo
 Borgeson, J. Marie, fa-So..
 Santaquin
 Bowen, Barbara, ap-F.....
 Rexburg, Idaho
 Bowen, M. Catherine, e-F..
 Murray

- Bowen, Darlene, ap-Sp..Provo
 Bowles, Richard A., a-F....
 Salt Lake City.
 Bowman, Kathleen, fa-F....
 Colonia Dublan, Chih., Mex.
 Bowman, Lorraine, ss.....
 Salt Lake City
 Boyack, Elnora Louise, ap-J
 Cheyenne, Wyo.
 Boyer, Genevieve, c-So.....
 Springville
 Boyer, Leah, fa-F.....Provo
 Bradbury, Leroy Glen, a-Sp..
 Provo
 Bradfod, Lester Glenn, a-F
 Spanish Fork
 Bradley, Faye Ora, fa-F, Provo
 Bridges, Charlotte Marie, ap-
 JLaJara, Colo.
 Briggs, Faye, fa-F, Amer. Fork
 Bright, Edythe, c-F, Rigby, Ida.
 Brimhall, Betty Allen e-F..
 Bingham Canyon
 Brimley, Elaine, fa-F.....
 Salt Lake City
 Brimley, Inez June, ap-F...
 Salt Lake City
 Brinley, Audrey June, fa-F
 Las Vegas, Nev.
 Brockbank, Wells Evans, ss
 Spanish Fork
 Brockbank, Zina C., ss..Provo
 Broderick, Clara, e-F,
 Roosevelt
 Brossard, Nan Rae, fa-F....
 New Orleans, La.
 Brough, Arta Jenkins, ss...
 Nephi
 Brough, Joan, c-F.....Nephi
 Brough, Sheila, fa-F.....
 Evanston, Wyo.
 Brown, Bessie, ss.....
 American Fork
 Brown, Cherrill, ss
 El Centro, Calif.
 Brown, Ina Chipman, a-Sp..
 Provo
 Brown, Lou Anne, a-F, Provo
 Brown, Louise, e-So.....
 Tempe, Ariz.
 Brown, Norma Long, a-J, Royal
 Brown, Wanda, a-F....Provo
 Browne, Edna Smith, fa-So
 Greenwich, Nova Scotia, Can.
 Browning, Norma Marie, c-F
 Jerome, Ida.
 Bruhn, Arthur F., G.....Orem
 Brunson, Marilyn, ss, Fillmore
 Bryson, Afton, e-J, Bountiful
 Buckley, Ada Conover, ss, Provo
 Buckley, Dorothea J., ss, Orem
 Buell, Lucile, c-F, Heber City
 Bugg, Donald Alvin, a-F...
 Blanding
 Bugg, Etheldeen, ss..Blanding
 Bullock, Anna Jean, fa-J....
 Montrose, Colo.
 Bunderson, Grace, e-So, Emery
 Bunnell, Carol Roberts, fa-S
 Salt Lake City
 Bunnell, Helen, fa-Unm..Orem
 Burgi, Lacy Leone, e-So....
 Midway
 Burgon, Helen Mabey, fa-S-
 ssMidvale
 Burgon, Madge, ap-J, Midvale
 Burke, Bonnie, a-F
 Alameda, Calif.
 Burleigh, LeRoy Richard, fa-
 So-ss.....Waymart, Penn.
 Burnham, Barbara, ap-F....
 Ruth, Nev.
 Burt, Janice, fa-F
 Salt Lake City
 Burton, Agnes Jean, c-So....
 Washington, D. C.
 Bushman, Anna Joy, e-F....
 Salt Lake City
 Bushman, Morris Smith, a-
 SoJoseph City, Ariz.
 Bushman, Nellie, sp-So.....
 Joseph City, Ariz.
 Bushman, Pauline, fa-F....
 Joseph City, Ariz.
 Bushman, Sariah Ann, fa-F
 Snowflake, Ariz.
 Butler, Jessie Fern, e-So....
 Spanish Fork
 Butler, LuDean, a-F.....Provo
 Butler, Margaret, ss.....
 Driggs, Ida.
 Buttle, Leland, G.....Provo
 Bybee, DarThel, fa-F.....
 Nyssa, Ore.
 Bybee, Julia Luisa, a-S.....
 Cedar City
 Calderwood, LaRee, fa-F....
 Salt Lake City
 Caldwell Enid, fa-F-ss, Vernal
 Call, Audra Lucile, ss.....
 Rigby, Ida.
 Call, Dove, fa-F....Boise, Ida.
 Call, Rhoda Vaun, fa-S-ss..
 Pocatello, Ida.
 Camenish, Valene, fa-Sp, Provo
 Campbell, Cleo, a-F, Roosevelt
 Campbell, Jeanne Leone, A-F
 Salt Lake City
 Campbell, Sarah D., fa-Sp...
 Provo

- Carlson, Arlene, a-F
 Long Beach, Calif.
 Card, Aaron Christensen, a-
 So...Cardston, Alberta, Can.
 Cardon, Brookiemae, a-So-ss
 Canon City, Colo.
 Carlile, Maretta, fa-F....Manti
 Carling, Otis, G.....Provo
 Carroll, Elsie Chamberlain, ss
 Provo
 Carter, Calvin LeRoy, a-F
 Provo
 Carter, LaVetta, ap-F, Provo
 Carter, Phyllis, c-F...Morgan
 Carter, Shirlee Mae, a-Sp., Provo
 Carter, F. Vanda, e-F, Morgan
 Cash, Beatrice, ss....Midvale
 a-So Centerville
 Chaffin, Walter Cadman, ss
 Tucson, Ariz.
 Castleton, Emelyn Reading
 Chaknias, Garefalia, fa-F..
 Spanish Fork
 Chambers, Frank Goddard, G
 Garland
 Chandler, Emille, w, fa-Sp..
 Hiawatha
 Chantrill, Susan, ss,.....
 Rexburg, Ida.
 Chapman, Helen J., e-S...Provo
 Char, Jean Fung, fa-F.....
 Honolulu, T. H.
 Chatterton, Roylance Wayne
 a-S-ss Preston, Ida..
 Child, Marian Amy, fa-F....
 Bluewater, New Mexico
 Child, Maurine, e-So-ss.....
 Springville
 Childs, Myrtle Ann, G.....
 Springville
 Chipman, Florence, ss
 American Fork
 Chipman, Ora Jean, ss.....
 American Fork
 Chipman, Ralph S., ss.....
 Huntington
 Christensen, Adella, e-S....
 Ontario, Oregon
 Christensen, Anne, fa-F....
 Las Vegas, Nev.
 Christensen, Beth, a-So.....
 Salt Lake City
 Christensen, Buckley, a-F...
 Monticello
 Christensen, DelMoine C., G
 Springville
 Christensen, Deola, c-F, Delta
 Christensen, Dorothy Viola,
 c-Umn Moroni
 Christensen, Earlene, fa-So..
 Manti
 Christensen, Elayne Enid, a-
 So..... Provo
 Christensen, Grant M., ap-F
 Delta
 Christensen, Herbert K., a-S
 Springdale
 Christensen, Joan, a-F.....
 Brigham City
 Christensen, Joyce Elenore,
 fa-F Los Angeles, Calif.
 Christensen, Karma Johanne,
 c-S Elsinore
 Christensen, Lillian A., ss..
 Springdale
 Christensen, Lillian F., ap-S
 Fillmore
 Christensen, Lucy, ss.....
 Rexburg, Ida.
 Christensen, Mary Ellen, fa-
 So Summit, N. J.
 Christensen, Muriel, fa-Sp..
 Provo
 Christensen, Odell, c-J-ss.....
 Pleasant Grove
 Christensen, Reed W., a-F...
 Monroe
 Christensen, Ruth J., ss, Provo
 Christensen, Sadie B., ss, Provo
 Christensen, Shirlee, a-F, Orem
 Christensen, Verla, a-F.....
 Wendell, Ida.
 Christensen, Wilma, ap-So..
 Antonito, Colo.
 Christiansen, Carol Beth, fa-
 F Pleasant Grove
 Christiansen, Eloise, e-Umn
 Provo
 Christiansen, Erma L., ss....
 Gunnison
 Christiansen, John Orrock, a-
 So Beaver
 Christiansen, Nola V., e-F...
 Monroe
 Christopherson, Glenna Joan
 fa-F San Bernadino, Cal.
 Church, Woodrow Henry, e-
 So Escalante
 Chytraus, June, ap-F.....
 Ontario, Oregon
 Clark, Anna Deon, fa-So, Tooele
 Clark, Anna Deon, fa-So, Tooele
 Clark, Betty LaRae, fa-Umn
 Alhambra, Calif.
 Clark, Clarence R., fa-So...
 Peru, Ind.
 Clark, Clella, ap-F..Bountiful
 Clark, Erma, fa-So....Morgan
 Clark, Jean LaRue, a-F.....
 Redwood, Calif.
 Clark, Mable H., ss.....Provo
 Clark, Marrial, c-J.....Provo

- Clark, Naomi, e-F, Farmington
 Clark, Orissa, fa-Sp....Provo
 Clark, Pauline S., fa-Sp-ss..
 Provo
 Clark, Phyllis, e-J,
 Salt Lake City
 Clark, Mrs. R. Garn, ss, Provo
 Clark, Stanley Charles, fa-
 Unm Arcadia, Calif.
 Clark, Stephen Hone, a-Sp..
 Provo
 Clark, Virginia, a-So.....
 Panguitch
 Clarke, Alva John, G-ss, Provo
 Clarke, Edna S., ss
 Salt Lake City
 Clarke, Leola Knudsen, ss,..
 Provo
 Clayson, Beth, fa-S.....Provo
 Clayton, Margaret Edith, a-
 J Springville
 Clegg, Helen, a Unm....Provo
 Clegg, Janet Ruth, e-F, Provo
 Clegg, Lona Mae, fa-F....
 Blackfoot, Ida.
 Clement, Jean Reese, ss, Price
 Clement, Rita, fa-F
 Richmond, Calif.
 Cloward, Vera H., ss..Payson
 Cochrane, Myrtle T., ss, Provo
 Coffin, Ruth a-F.....
 Salt Lake City
 Coffman, Glenn Wood, G....
 Springville
 Coleman, Genevieve, a-F, Provo
 Coleman, Robey B., ss, Provo
 Collard, Carol Larue, e-So,
 Provo
 Collins, Delphia, a-F.....
 Roosevelt
 Collins, Irene Fillmore, fa-
 Sp-ss Provo
 Collins, Reed, G Provo
 Connell, William, G....Provo
 Cook, Edna Maria, ss, Hooper
 Coombs Barbara LaVern, fa-
 J.....Salt Lake City
 Coombs, Belva, fa-F....Ogden
 Cooper, Laurence Clark, a-J
 Provo
 Copenhaver, Ardevve Fay, a-
 F..... Nampa, Ida.
 Corbett, Gladys B., ss.....
 St. George
 Corless, Marjorie, fa-F.....
 Randolph
 Cornaby, Mary J., ss.....
 Spanish Fork
 Cottam, Katherine Stokes, a-
 Sp Provo
 Cottam, Margery Bee, a-So..
 Evanston, Ill.
 Cottle, LaRue, c-J,
 Rexburg, Ida.
 Cowley, Shirley, a-F...Venice
 Cowley, Waldean, a-F.....
 Cox, Arlene, e-F...Orangeville
 Cox, Carol, c-F.....Nephi
 Cox, Donald Burns, a-J,....
 Fairview
 Cox, Janyce Uteley, ss.....
 Orangeville
 Cox, Jean, ap-SProvo
 Cox, Pauline, c-F.....Manti
 Crandall, Barbara J., a-F...
 Mesa, Ariz.
 Crandall, Beth M., a-J, Provo
 Crandall, Lars G., ss...Provo
 Crane, Lorna W., c-J, Draper
 Crane, Minnie, ap-F.....
 Burley, Ida.
 Crane, Willa Ann, c-F, Draper
 Cranney, Norma, a-F.....
 Burley, Ida.
 Cawford, Carol, fa-J...Manti
 Creer, Beatrice Simper, ss..
 Midvale
 Crittenden, Marian Dorlene,
 fa-F Los Angeles, Calif.
 Cromar, Bonnie Jean, c-J....
 Pleasant Grove
 Cronin, Beverly Frances, c-
 So Eureka
 Crowley, LaRue G., ss, Kanosh
 Crowther, R. Eldon, G, Provo
 Crowther, Valeea, e-F
 Tremonton
 Cullimore, Eunice L., e-Sp,..
 Provo
 Cullimore, Karma Jean, a-J
 Provo
 Cullimore, Odessa A., ss, Provo
 Cunningham, Morris H., ap-
 F Sanford, Colo.
 Curtis, Dee, C-F
 Salt Lake City
 Curtis, George, a-Unm
 Orangeville
 Dalby, Ralph Lisle, ap-F....
 Los Angeles, Calif.
 Dalley, Wm. Jay, ap-F.....
 Gunnison
 Dalton, Donavon, a-Unm...
 Eureka
 Dana, Beverly June, ap-F...
 Mesa, Arizona
 Daniel, Ivy Gilroy, fa-Sp, Provo
 Dauwalder, Mary Ellen, c-J
 Provo
 David, Isabel, a-So.....Provo
 Davidson, Anna Vernessa, a-
 J St. Anthony, Ida.

Davidson, Leah Belle, e-J....
 Rexburg, Ida.
 Davis, Georga Ann, c-Unm
 Springville
 Davis, Jeanne, fa-F, Boise Ida.
 Davis, Mardean, fa-F,
 Davis, Marion, c-F, Springville
 Davis, Mattie Ann, G, ...Provo
 Davis, Ruth Dayle, ap-F....
 San Bernardino, Calif.
 Davis, Viola Ludlow, ss, Beaver
 Davis, Virginia, fa-F.....
 Stockton, Calif.
 Davis, Vonnice Beth, a-Unm
 Glendale, Calif.
 Day, Ladd Robins, a-So,....
 Fillmore
 Day, Lora Virginia, c-F, Aurora
 Day, Robert Bruce, fa-F....
 Eureka, Calif.
 Dean, Leo A., a-F.....Provo
 Dean, Ruby J., ss....Ephraim
 Dearden, Larene, ap-So.....
 Garrison
 Decker, Cleona, ssKamas
 Decker, Pearl Adams, ss....
 Kamas
 DeCoursey, Wesley Frank-
 lin, GNampa, Ida.
 Dennett, Boyd, e-Sp St. George
 Dennis, Fern Fairbanks, ss..
 Provo
 Devenport, Hester Warner,
 ss..... Rexburg, Ida.
 Dewsnup, Mavis, ap-F, Deseret
 Dial, Dawna Marie, a-F....
 Salt Lake City
 Dickson, Josephine A., a-F
 Layton
 Dickson, Peggy, a-F
 Tacoma, Wash.
 Dickinson, Clark R., a-F....
 Richfield
 Dieu, Vernon Celestion, a-J
 Ogden
 Distefano, James W., c-F, Provo
 Dixon, Alice Delenna, ss, Provo
 Dixon, Louise, ap-S....Ogden
 Dixon, Mary Lou, c-So, Provo
 Done, Adeline, fa-F....Provo
 Downward, Vera Irene, ss..
 Spring City
 Drake, Yvonne Marie, a-F..
 Burley Idaho
 Draper, Phyllis Ann, a-F....
 Midvale
 Drissell, Lorraine, fa-J, Provo
 Drollinger, Dolores, e-F....
 Bluebell
 Drollinger, Velda M., e-F....
 Richmond

Duckworth, Gertrude M., c-F
 Nephi
 Duke, Junius Lyle, ap-F....
 Burley, Ida.
 Dummer, Mavis Arlene, fa-F
 Burley, Ida.
 Dunn, Lono J., e-S, Richfield
 Durfee, Leila, c-F.....Aurora
 Durfee, Lola, ss.....Provo
 Durnell, Bertha V., ss, Provo
 Dutson, Kendall, a-So-ss, Provo
 Dyches, Winnifred Margaret,
 fa-So Monroe
 Dyck, Walter Dietrich, ap-F
 White Water, Kansas
 Dyer, Gwendolyn, a-So.....
 Portland, Ore.
 Dyreng, Claire, a-F....Manti
 Dyreng, Marjorie, ap-F, Manti
 Eames, Lila, ap-F....Bountiful
 Earl, LaVieve Huish, a-Sp-
 ss.....Provo
 Ebenstein, Barbara, ss, Orem
 Edmunds, Patricia Dell, e-F
 Provo
 Edwards, Fern Wadley, ss..
 American Fork
 Egan, Mary Louise, fa-F, Provo
 Eichelberker, Jack Oscar, a-
 So-ss Provo
 Elder, Esther Alice, ap-F....
 Salt Lake City
 Elder, Jos. Franklin, a-Unm
 Provo
 Elder, Juana, c-SoOrem
 Elder, Olive B., fa-Sp....Provo
 Eldredge, Leah L., ss.....
 Salt Lake City
 Eldredge, Martha L., ss.....
 Salt Lake City
 Eldredge, Wilma L., ss.....
 Salt Lake City
 Eliason, Genevieve L., c-So
 Deseret
 Elison, Maythel, a-F.....
 Malta, Idaho
 Ellertson, Agnes Lona, e-So
 Mona
 Ellertson, Donna, a-So, Provo
 Ellertson, Gwendolyn Madge,
 e-So Mona
 Elliott, Jeanne Adelle, fa-F
 Salt Lake City
 Ellis, Bonnie, ap-Unm.....
 Palmyra, N. Y.
 Ellis, Dorothy Mae Halls, a-
 J Mancos, Colorado
 Ellison, Betty, a-F.....Provo
 Ellsworth, Genevieve, G, Provo
 Ellsworth, Thyrlie Edmund,..
 c-F El Monte, Calif.

- Ellsworth, Winifred, ap-F..
 Mesa, Ariz.
 England, Ruth W., a-J, Tooele
 Englestead, Arlene, ap-F....
 Kanosh
 Epperson, Emery G., ss.....
 Salt Lake City
 Ercanbrack, Ruth Ann, ap-
 J Provo
 Erickson, Leroy Alfred, G..
 Springville
 Eskelson, DeVan Oscar, ap-
 So Emmett, Ida.
 Esplin, T. Lavoy, ss.....Provo
 Evans, John Alldridge, ss, Provo
 Evans, LaRae, fa-F.... Lehi
 Eyering, Robert Chipman, fa-
 So Provo
 Fackrell, Martha Jeanne, a-
 F Bountiful
 Fairbanks, Letitia I., ap-F
 Hollywood, Calif.
 Fairbourn, R. Lavon, ap-F..
 Salt Lake City
 Farnsworth, Alberta, c-F....
 Colonia Dublan, Chih., Mex.
 Farnsworth, Leona, a-Soi..
 Colonia Dublan, Chih., Mex.
 Farnsworth, Shirley Maxine,
 a-F.... Redwood City, Calif.
 Faux, Eugene J., G-ss, Provo
 Felsch, June Evelyn, c-F...
 Palo Alto, Calif.
 Fenn, Rey L., a-Sp-ss, Provo
 Ferguson, Jeane Ruth, c-Unm
 Sherman Oaks, Calif.
 Ferguson, Thelma, fa-Sp, Provo
 Ferrin, Barbara, fa-So-ss..
 Chico, Calif.
 Fjelding, Max Jae, a-F..Orem
 Fillmore, Wiza R., fa-Sp-ss
 Provo
 Fingerle, Clarence O., a-So..
 Ogden
 Finley, Bessie G., ..Springville
 Finley, May, ss,....Springville
 Firmage, Florence, fa-So....
 Spanish Fork
 Fisher, Signa LaVon, a-F....
 San Diego, Calif.
 Fisher, Thela, ap-F, Clearfield
 Fisher, Vonda, ap-So.....
 Rigby, Idaho
 Fjeldsted, Lillian W., ss....
 Ephraim
 Flake, Augusta, ss.....
 Snowflake, Ariz.
 Flake, Imogene, fa-F.....
 Snowflake, Ariz.
 Flanders, Edward Dean, ap-
 So Chicago, Ill.
- Flanders, Ruth Elaine, ap-So
 Chicago, Ill.
 Fletcher, E. Elizabeth, a-F
 Park City
 Follett, Dorothy Maybelle, a-
 Unm Cambridge, Mass.
 Foote, Chlora Iown, e-So....
 Salt Lake City
 Foote, Jacqueline, c-So, eNphi
 Forsey, Lora Jean, e-So, Payson
 Forsey, Norma Elaine, Eureka
 Fosyth, Jay LeGrand, fa-Sp
 Provo
 Forsyth, Maria Hayes, a-So
 Provo
 Forsyth, Nola Fern, ap-F....
 Kalispell, Mont.
 Foster, Ruth May, c-F, Provo
 Foutz, Emogene, c-F.....
 Kirtland, N. M.
 Fowkes, Olive, ap-J, Santaquin
 Fowles, Shirley, fa-F.....
 Oakley, Ida.
 Frampton, Vera E., ss, Fillmore
 Francis, Ferne, fa-F'
 Santa Ana, Calif.
 Frandsen, Victor Glenn, G..
 Springville
 Fredrickson, Grant, ap-J....
 Roosevelt
 Freestone, I. Lorraine, fa-So
 Mesa, Ariz.
 Frisby, Stella Orlene, e-Sp..
 Salt Lake City
 Frost, Reed Leon, a-F....
 Denver, Colo.
 Fujie, Asa Arthur, c-S-ss, Topaz
 Fujii, Ben T., c-So,
 Amache, Colo.
 Fukuda, Fred Masao, c-S....
 Poston, Ariz.
 Fukuda, Kimiyo, Marion, c-F
 Poston, Ariz.
 Fuller, Irene, fa-S.....
 Barnwell, Alberta, Can.
 Fullmer, Elladene, ap-E....
 Abraham
 Fullmer, Helen Gladys, c-F
 Delta
 Funatake, George, a-F.....
 Nyssa, Ore.
 Funk, Gene, G.....Richmond
 Furukawa, Takao, c-J-ss..
 Rivers, Ariz.
 Gaisford, Elaine, Ap-F.....
 American Fork
 Galgan, Susan Valerie, a-F..
 Provo
 Galway, Desma Hall, G, Provo
 Gappmayer, Beatrice Flor-
 ence, fa-F' Orem

- Gardner, Cora E., G.....
 Springville
 Gardner, George Grant, ss..
 Payson
 Gardner, Gladys, e-Sp-ss.....
 Ogden
 Gardner, R. Gerber, Ap-Sp..
 American Fork
 Gardner, Lois, ap-J, Pine Valley
 Gardner, Lucille, fa-F.....
 Los Angeles, Calif.
 Gardner, Marion, c-F.....
 Grand Junction, Colo.
 Gardner, Russell Movelle, a-
 Sp Springville
 Gavaille, Melba L., e-S, Ogden
 Geertsens, O. Norman, G, Provo
 Geslison, Lola S., c-J.....
 Spanish Fork
 Gilbert, Art G., G., ..Springville
 Gilchrist, Dorothy, ss.....
 Ontario, Ore.
 Giles, Anna Lou, a-F.....
 Salt Lake City
 Giles, Norma D., c-Sp...Provo
 Giles, Susie, ss...Heber City
 Gillespie, Melba, fa-F.....
 San Pedro, Calif.
 Ginn, Leta Marcein, c-F....
 Greenville, S. C.
 Gledhill, Ilah Dean, e-J.....
 Richfield
 Gledhill, T. R., ss, Richfield
 Glover, Elva, ss.....Midvale
 Goates, Rhoda May, ap-J..
 St. George
 Goltz, Gloria Mae, fa-F.....
 New York City, N. Y.
 Goodrich, Jeanne, e-F, Bluebell
 Goodrich, Venna N., c-F,Vernal
 Gould, Robert, GProvo
 Gorbutt, Bette Colleen, fa-F
 Lovell, Wyo.
 Goodson, Nona M., ss...Provo
 Graehl, Norma, e-Unm, Provo
 Graff, Chester, G.....Orem
 Graham, Floyd E., c-F....
 Salt Lake City
 Grange, Morinda, e-Sp-ss.....
 Midvale
 Gray, Dean William, a-F, Provo
 Greaves, Anne, fa-So.....
 Salt Lake City
 Greaves, Gwen A., ss, Ephraim
 Green, Carol C., fa-F.....
 Verona, Calif.
 Green, Geraldine, fa-F, Provo
 Green, W. Herman, fa-S, Provo
 Green, Vivian, a-So.....
 American Fork
 Greenhalgh, Ralph Clark, a-
 Nephi
 Greenhawk, Marcille, fa-J..
 Chicago, Ill.
 Groesbeck, Rhoda, ss.....
 Springville
 Groneman, Gloria Orvilla, fa-
 UnmProvo
 Groneman, Lillian J., fa-Sp..
 Provo
 Groneman, Orvilla Buys, fa-
 Sp Provo
 Groneman, Paul Stanton, a-J
 Provo
 Gross, Evelin Virginia, fa-F
 Multnomah, Ore.
 Grove, Donna Vera, ap-F....
 Roosevelt
 Guild, Roberta, a-F.....
 Spanish Fork
 Guttrich, Ann, a-Sp.... Provo
 Guymon, Lela, fa-Unm, Provo
 Gwilliam, Doris Marie, fa-F
 Boise, Ida.
 Gwynn, Elaine, ap-So.....
 Washington D. C.
 Hacking, Ralphena, ss, Provo
 Hafen, Mavis, a-So.....Provo
 Haggerty, Beth Leone, a-Sp
 Provo
 Halbersleben, Helen, a-F Provo
 Hale, Verla, e-S.....Ogden
 Hales, Isabel, ss.....Provo
 Hales, Leo, fa-Sp, Spanish Fork
 Hales, Lesley Aileen, a-F....
 Springville
 Hales, Margaret, a-J....Provo
 Hales, Naomi Juanita, fa-F..
 Brigham City
 Hales, Norma J., ssOrem
 Hales, Ray G., a-Sp, Springville
 Halladay, Norma Deene, e-
 So Provo
 Haller, Lorraine Mary, a-So
 Los Angeles, Calif.
 Halliday, Nina A., ss.....
 American Fork
 Hamblin, Joyce, ap-F.....
 Heber City
 Hammond, Mae, ss.... Provo
 Hammond, Therese, ss Provo
 Hanks, Joyce M., e-So, Salem
 Hanley, Dovey A., ss Dragerton
 Hanley, Vondella Knight, ss
 Dragerton
 Hanseen, Rayola, a-Unm Provo
 Hansen, Afton Allred, e-Sp-
 ss Provo
 Hansen, Barbara, a-F, Richfield

- Hansen, Beth H., e-ss Boise, Idaho
 Hanson, Fern Esther, ap-F... Salt Lake City
 Hansen, Geraldine, ap-F.... Redmond
 Hanson, Harold J., ss Sunnyside
 Hansen, Joy, c-F.....Monroe
 Hansen, Julia, fa-So..... Salt Lake City
 Hansen, Julia Helen, e-S.... Centerfield
 Hansen, A. Kelsch, a-Sp..... Salt Lake City
 Hanson, Lois, fa-So, Springville
 Hanson, Leora, G.....P. Provo
 Hansen, Meredith, e-F, Provo
 Hansen, Rowena, ssEureka
 Hansen, Ruth, ss.....Delta
 Hansen, Verna Raye, a-F Provo
 Hanson, Victor Milo, aF..... Pocatello, Idaho
 Harding, Cleo, e-Unm, Provo
 Harding, Jennie, ss.....Provo
 Harding, Shiralee, c-So, Provo
 Hardle, May Francis, a-Unm San Francisco, Calif.
 Hardy, Beverly Rose, a-F.. Portland, Ore.
 Harmer, Dorothy, G-ss..... Springville
 Hardy, Edna, ssOgden
 Harper, Fontella, A-F..... Malta, Ida.
 Harris, Barbara Jeanne, e-F Salt Lake City
 Harris, Charlotte Orcella, a-F..... Potland, Ore.
 Harris, Madolyn Joyce, c-Unm Provo
 Harris, Margaret O., G, Provo
 Harris, VaLois, a-F, Bountiful
 Harrison, Marina Melle, a-Sp Provo
 Hart, Clarice H., G....Provo
 Hart, Marjorie Jean, a-So.. Long Beach, Calif.
 Hart, Quella Allred, ss, Provo
 Hartshorn, Bethe, a-J..... American Fork
 Hartshorn, Robert Jr., a-S... American Fork
 Harvey, Marie, c-F...Blanding
 Haslem, Rhea, p-So, Roosevelt
 Hatanaka, Kameko, ap-S.... McGehee, Arkansas
 Hatch, Anne Cottam, a-Sp.. Provo
 Hatch, Dorothy Goates, a-S... Provo
 Hatch, Madelyn, fa-So..... Colonia Juarez, Chih., Mex.
 Hatch, Patricia, a-So, Provo
 Hatch, Robert Ransom, a-F Provo
 Hawker, Ila Marie, fa-F.... Menan, Ida.
 Hawkins, Agnes Farrer, ss... Provo
 Hawkins, Donna M., a-F.... Florham Park, N. J.
 Hawkins, Evelyn, e-J-ss.... St. George
 Hawkins, Yvonne, c-So..... Wapato, Wash.
 Haws, D. Virgil, ss.....Provo
 Hayes, Margaret May, ss... Pleasant Grove
 Haynes, Gertrude Lillian, a-F St. Ignatius, Mont.
 Heatherly, Geraldine, c-F.. Greenville, S. C.
 Heaton, Ione Huish, ss, Provo
 Heavener, Cleo Pierce, G.... Springville
 Hedquist, Junece, ss.....Provo
 Henderson, Laura, ss....Provo
 Heilesen, LaPreal, e-F Glenwood
 Henderson, Lillian, fa-F.... Fayetteville, Tenn.
 Hendrickson, Marcene Elaine a-FIdaho Falls, Ida.
 Hendrickson, Maurine, fa-So Preston, Ida.
 Heninger, Howard, ss...Provo
 Henriod, Charlotte Dale, ss... Provo
 Henry, Jacqueline, ap-F.... Oakland, Calif.
 Hepworth, Bernice, ss Hinckley
 Hepworth, Iola Rae, e-F.... Hinckley
 Hess, Katherine Irene, fa-So Grand Junction, Colo
 Hibbard, Dorla Dot, a-F.... Boise, Idaho
 Hicken, Alta Mae, c-Sp, Provo
 Hicken, Mima Broadbent, e-SpHeber City
 Hickman, Helen, fa-Sp..Provo
 Higginson, Bonnie, e-F..... Bancroft, Idaho
 Higley, Betty Jean Ruth, c-F Hooper
 Hill, Elizabeth, G..... Salt Lake City

Hill, Izora Faun, fa-F..Provo
 Hill, Joy, e-J..... Provo
 Hillman, Helen Mae, a-S....
 Thornton, Ida.
 Hilton, Carole, ap-So, Delta
 Hilton, Dawn, ap-F....Delta
 Hiskey, Renabell, ss Teasdale
 Hodapp, Minnie Iverson, ss..
 American Fork
 Hodges, Willadeen, a-F....
 Bingham Canyon
 Hogan, Lydia Peterson, e-Sp-
 ss Provo
 Hogge, Ethel, e-S.....Eden
 Holbrook, Ada Jean, c-F....
 Bountiful
 Holbrook, Leona, ss
 Salt Lake City
 Holling, M. Ruth, ap-F.....
 Portland, Ore.
 Hollis, Lona, ssMilford
 Holm, Floyd S. ss Spanish Fork
 Holmes, Mable, c-F.....
 Burley, Ida.
 Holt, Edna, e-F..Oakley, Ida.
 Holyoak, Helen VerJean, e-F
 Burley, Idaho
 Homer, Ben F., a-F.....
 Pleasant Grove
 Honeyman, Roger Bruce, a-
 Unm Provo
 Hoover, Lovina, ap-J...Provo
 Horrocks, Frances, ss
 Roosevelt
 Horsley, A. Burt, a-S
 Brigham City
 Horvath, Margaret, e-Sp Provo
 Hoshimiya, David Nobto, ap-
 Sp-ssSalt Lake City
 Houghton, Betty Lou, fa-F..
 Salt Lake City
 Copperton, Bingham Canyon
 Howard, Darlene, fa-F....
 Howell, Maurine, e-So.....
 Malad, Ida.
 Howell, Noel A., ss..Fairview
 Howes, Maxine Louise, fa-F
 American Fork
 Hoyt, Vivian, e-So.....Nephi
 Huber, June, ap-So....Lapoint
 Huber, Matilda e-Sp-ss Midway
 Hughes, Eldon Wesley, e-J
 Mesquite, Nev.
 Hullinger, Eula, fa-F, Vernal
 Hunsaker, Meda A., ss
 American Fork
 Hunsaker, Nydria Ellen, a-F
 Mesa, Arizona
 Hunt, Verdell, ap-J Pine, Ariz.
 Hunter, Faye, fa-J Castle Dale

Hunter, Frances Jeanne, fa-F
 Richfield
 Hunter, Nona Rae Stanton,
 e-S Grace, Idaho
 Hunter, Phyllis Marjorie, ap-
 J Idaho Falls, Ida.
 Hunter, Richard Carl a-F..
 Provo
 Hunter, Wilma G., ap-S....
 Idaho Falls, Ida.
 Huntsman, Jay R., e-J Provo
 Hurst, Betty Jean, ap-F....
 El Paso, Tex.
 Hurst, Margie, fa-So, Blanding
 Hussey, Mary Louise, fa-J
 Price
 Hutchins, Ruth, fa-So
 Arcadia, Calif.
 Hutchinson, Gloria, ap-F....
 Payson
 Hyatt, Anita Belle c-So....
 Joliet, Illinois
 Hyatt, Norman Frederick, a-
 F Joliet, Illinois
 Hyde, John Taylor, a-J
 Salt Lake City
 Hyde, Marian Stratford, c-
 SoChevy Chase, Md.
 Ipsen, Iris Jane, c-F,.....
 Malad, Ida.
 Irons, Doris W., ssNephi
 Isaac, Jack Blaine, fa-F....
 Spanish Fork
 Isaac, John Dixon, a-J.....
 Spanish Fork
 Itaya, Frank Yoshio, ap-F..
 Los Gatos Calif.
 Ivey, Wayne Franklin, a-F..
 Mena, Ark.
 Ivie, Ray Harding, a-J Provo
 Ivins, Heber G., ss.....Provo
 Iwamoto, Chiyako, ap-F....
 Payson
 Jack, Ralph L., a-F
 Salt Lake City
 Jackson, Charlotte, ss.....
 Oblong, Ill.
 Jackson, Elda B., ss.....Provo
 Jackson, Ruth, ap-F, Provo
 Jackson Shirley, c-F....Provo
 Jackson, Yvonne, a-S
 Toquerville
 Jacob, Betty June, a-F Orem
 Jacobi, Jay Ward, a-F.....
 Sioux City, Ia.
 Jacobs, Marilyn, fa-F.....
 Oakland, Calif.
 Jacobson, Alma Evan, G....
 Springfield

- Jacobson, James Fay, a-F...
 Oak City
 Jacobsen, Mary G., fa-Sp-
 ss Provo
 Jacobsen, Ruby Hansen G...
 Provo
 James Ila Mae, e-So
 Spanish Fork
 James, Rachel Barlow, a-S-
 ss Provo
 James, Richard Alan, ap-F...
 Rock Springs, Wyo.
 Jaramillo, Anita Marie, e-S
 Vallecitos, New M.
 Jaynes, Annie Carol Proctor
 ss Pleasant Grove
 Jenkins, Marba J., c-F Nephi
 Jenkins, Muriel Roberta, fa-
 Springville
 Jennens, Shirley Marie ap-F
 Detroit Mich.
 Jensen, Agnes, ap-F.....
 American Fork
 Jensen, Bette Loy, fa-F.....
 Fairview
 Jensen, Beverly, e-S-ss, Provo
 Jensen, Bradford Acord, ss..
 Ferron
 Jensen, Edith Ann, a-F.....
 Milwaukee, Wis.
 Jensen, Florence H., a-Sp, Provo
 Jensen, Freda Joan, ss Sandy
 Jensen Ivie G. ss Provo
 Jensen Jenna V. e-F Springville
 Jensen, Joan Ballif, a-F, Provo
 Jensen, John Daniel, a-F, Provo
 Jensen, Lola, e-J
 Pleasant Grove
 Jensen, Lynn Albert, a-F...
 Rexburg, Ida.
 Jensen, Lyravine, a-So....
 Pleasant Grove
 Jensen, Margie, c-F...Deseret
 Jensen, Mildred, fa-Sp...Lehi
 Jensen, Moroni L., a-Sp, Salina
 Jensen, Roney Snow, ss, Emery
 Jensen, Ruth Elaine, e-S...
 Fairview
 Jensen, Twila Jane, a-F....
 Winslow, Ariz.
 Jensen, Vivian Leigh, c-F,..
 Provo
 Jepperson, Robert Kay, a-Sp
 Orem
 Jeppson, Marie Thorne, ss..
 Brigham City
 Jex, Esther May, a-J.....
 Spanish Fork
 Jex, Mary Ellen, a-F...Provo
 Johnson, Lois, ap-So,
 Springville
 Johnson Lourene fa-So.....
 Salt Lake City
 Johnson, Margie, ap-S.....
 Glenns Ferry, Ida.
 Johnson, Marie Allan, ss....
 Springville
 Johnson, Marvel H., a-So, Provo
 Johnson, Melba S., fa-Sp....
 Springville
 Johnson, Merle Edith, a-J..
 St. Anthony, Ida.
 Johnson, Metta., e-J.....
 St. George
 Johnson, Nelda Iris c-F, Orem
 Johnson, Pauline Pearl, c-F
 Phoenix, Ariz.
 Johnson, Ruby Alene, c-Unm
 Provo
 Johnson, Shirley Mae, fa-F..
 Salt Lake City
 Johnson, Shirley, a-F.....
 Springville
 Johnson, Zalia, ap-F
 Los Angeles, Calif.
 Johnson, Zenda Madelyn, fa-
 F Boise, Ida.
 Johnson, Zina R. a-Sp.....
 Springville
 Johnston Lols B., fa-F, Hooper
 Jolley, Keith J., c-Unm, Provo
 Jolley, Weldon Bosen, a-F,..
 Provo
 Jones, Dale Dean, c-S-ss.....
 Falls City, Nebr.
 Jones, Dorothea Irene, e-S..
 Douglaston, N. Y.
 Jones, Elma Jane, c-F
 Colonia Dublan, Chih., Mex.
 Jones, Geraldine a-So...Provo
 Jones Jennie Bea, c-F.....
 Malad, Ida.
 Jones, Lucile, G Provo
 Jones, Marion, a-So-ss, Provo
 Jones, Mary Donna, a-J....
 Pocatello, Ida.
 Jones, Mildred Phyllis, e-F
 Douglaston, N. Y.
 Jones, Neola Olsen, ap-J....
 Fairview
 Jones, Norma Hansen, ap-So
 Price
 Jones, Phyllis, fa-Unm.....
 Glendale, Calif.
 Jones, Ray Barnett, fa-So...
 Magna
 Jones, Valena, fa-S, Springville
 Jorgensen, Eleanor, ap-J, Price
 Jorgensen, Norma, fa-So....
 Castle Dale
 Jorgensen, Vivian, ss.....
 American Fork

Josie, Charles, ss.....Provo
 Judd, Edythe Clarice, fa-F..
 San Diego, Calif.
 Judd Margaret a-F, Grantsville
 Justeson, Bernice, ss.....Provo
 Kami, Seiichi, ap-F....Topaz
 Kane, Jacequeline Louise, e-
 So-ss Lima, Ohio
 Kanke, Arlene Marie, ap-F..
 Milwaukee, Wis.
 Kase, Alice, ss Beryl
 Kase, Grace Y., ap-F....Beryl
 Kawaguchi, Miharu, ap-S-ss
 ... Heart Mountain, Wyo.
 Kay, Eloise, a-J-ss, Heber City
 Kearl, Jennie Wright, ss...
 Randolph
 Keels, Carol Elizabeth, fa-
 Unm Provo
 Keeler, Jennie Maurine, fa-
 So Provo
 Keeler, Virginia C., fa-S-ss..
 Provo
 Kekauoha, Willard Kaahue
 ss..... Laie, Oahu, T. H.
 Keller, Helen, ap-F.....Manti
 Kellett, Jeanne, a-F....Hyrum
 Kelsey, Effie, e-Sp..... Provo
 Kenner, Martha, fa-Sp..Provo
 Kern, Earl, c-F...Preston Ida.
 Killpack, Evelyn, ap-F, Delta
 Killpack, Merlyn L., e-S-ss
 Provo
 Kimball, Andrew Eyering, a-
 F..... Salt Lake City
 King, Elizabeth Demson, ss
 Spanish Fork
 King, Joseph S., a-J-ss, Provo
 Kirkham, Jane Josephine, e-
 J Salt Lake City
 Kirkham, Jean, c-Sp....Provo
 Kissell, Iva, ap-J.....Price
 Kitchen, Hazel M., ss..Orem
 Kiyomura, Tosuko, ap-So, Orem
 Klingler, Eunice May, fa-
 Unm Yakima, Wash.
 Klingler, Ruth Odette, ap-
 S Rexburg, Ida.
 Knight, Donald Theron, ss..
 Twin Falls, Ida.
 Knight, Evelyn M., fa-Sp Provo
 Knight Gale Stewart, ss, Provo
 Knowlton, Paul Shumway, c-
 J Holladay
 Knudsen, Clarence, fa-Sp Provo
 Knudsen, Eda Arlene, ap-F..
 Provo
 Knudsen, Ida, ss Provo
 Knudsen, Ronald M., c-J, Provo
 Knudsen, Wesley F., a-Sp..
 Provo

Kobayashi, Michi ap-So.....
 Amache Colo.
 Kofford, Lorna Jean, c-Unm
 Orem
 Kohler, Eloise Jean, ap-So..
 Heber City
 Kohler, Ida Barbara, c-F...
 Midway
 Koyle, Blanche Hannah, e-So
 Burley, Ida.
 Koyle, Wells F., e-Sp.....
 Burley, Ida.
 Krebs, Ruth Marie, a-F.....
 Salt Lake City
 Lambson, John Charles, c-J..
 Sandy
 Lamoreaux Orien Huntsman,
 e-F St. George
 Lancaster, Donna Marie, a-
 F Wendell, Ida.
 Landeen, Robert Daniel, ap-
 F Rock Springs, Wyo.
 Landgren, Beverly Joyce, a-
 F Rockford, Illinois
 Landgren, John David, a-So..
 Rockford, Ill.
 Lane, Bette Francis, e-F....
 Evanston, Wyo.
 Lange, Helen Carrie, fa-F..
 Salt Lake City
 Larsen Alice, G Provo
 Larson, Andrew K., ss...
 Hurricane
 Larsen, Beth Renae, a-F.....
 Spanish Fork
 Larsen, Geneva Day, ss, Provo
 Larson, Lillis J., ss.....Provo
 Larsen, Lois LaVon, fa-F....
 Copperton, Bingham Canyon
 Larsen, Ralph Ernest, a-F Lehi
 Larson, Sterling C., G.....
 St. Anthony, Ida.
 Latimer Estill Vilate a-Sp..
 Provo
 Law, Leda C., ss Provo
 Law, Zola Rae, e-F-ss, Provo
 Laws, Marvin R., c-Sp, Provo
 Lay, Paula Errole, c-F.....
 Union, Ore.
 Lazenby, Amy, ss.....Aurora
 Leany, Elrod Cox, a-F Milford
 Leavitt, Audrey Louise, ap-
 F ..Cardston Alberta Can.
 LeBaron, Mary Louise, fa-F
 Barnwell, Alberta, Can.
 LeCheminant, Wilford Hill,
 ss Los Angeles, Calif.
 Lee, Lorine E. S. H., fa-S...
 Provo
 Lee, Thomas Wilford, a-F..
 Provo

- Lee, Wilford D., G.....Provo
 Lefler, Ardath Louise, fa-S
 Price
 Levie, Betty Jo, e-F....Sevier
 LeVitre Ruth, fa-F
 Los Angeles, Calif.
 Lewis, Amy M., ss.....
 Salt Lake City
 Lewis, Dawn, e-So.....Emery
 Lewis, Jack DeLoy, a-F ..Lehi
 Liechty, A. Bernice, e-F.....
 Springville
 Lillie, Phyllis Lucille, fa-F..
 Medford, Ore.
 Lind, Ruth, fa-Unm....Vernal
 Lindstrom, Evelyn Anna, a-
 J Roberts, Idaho
 Lindstrom, Marjorie Fern, e-
 J Roberts, Idaho
 Linford, Ruth Waterfall, ap-
 J Kaysville
 Liston, Mildred, e-S Escalante
 Little, Bessie Maude, c-F..
 Eden, Ida.
 Livingston, Dr. A. M., G.Provo
 Livingston, Lucile, fa-F....
 Spanish Fork
 Locander, K. Shirlee, c-Unm
 Provo
 Logsdon, Betty, c-So.....Lehi
 Looker Charles M., G....Provo
 Losey, Iva Opal, ss.....
 Abilene, Kan.
 Louder, Velda, fa-Unm...Orem
 Love, Irene Christensen, a-J-
 ss Provo
 Loveland, Euleen, a-F....Yost
 Lovell, Ferrin Anderson, c-
 So Oak City
 Lovell, Florence Lindsay, a-
 Sp-ssProvo
 Lovell, Merlene, ap-J, Oak City
 Loveridge, Thomas LeRoy,
 e-S Lehi
 Lowe, Dorothy Eleanor, ap-
 So....Calgary, Alberta, Can.
 Lowe, Gladys, a-So
 Philadelphia, Pa.
 Lowe, Howard D., c-S....Orem
 Lowry, Sheldon Gaylon, a-J-
 ss Provo
 Ludlow, Priscilla, fa-F
 Spanish Fork
 Luke, Lois Hunter fa-S....
 Cedar City
 Lund, Elaine Lucille, a-J....
 Los Angeles, Calif.
 Lund, Ella Oriole, e-Sp-ss
 Evanston, Wyo.
 Lundell, Russell, ss, Benjamin
 Lusty, Sybil, fa-So,..Duchesne
 Lyon, Fern, ss, Salt Lake City
 Macdonald, Georgena, fa-F..
 Phoneix, Ariz.
 Mack, Reed Floyd, a-F.....
 Inspiration, Ariz.
 Madsen, Beth, e-Unm....Provo
 Madson, Carlos N., a-Sp, Provo
 Madsen, Rae Christine, ss..
 Salt Lake City
 Madson, Rex A., a-F....Provo
 Maeno, Bernice Yukie, e-F..
 Kapaa, Kauie, Hawaii
 Maeser, Georgia, ss....Provo
 Magota, Toshi, c-S-ss.....
 Hanford, Calif.
 Maiben, Henry, fa-So.....
 Springville
 Mangum Garth Leroy, a-F..
 Orem
 Mangus, Wilda, c-F, Bountiful
 Manley, Francene, c-F, Moroni
 Manwaring, William March,
 ss Provo
 Marble, Glen Bert, a-F.....
 Malad, Idaho
 March, Lawrence B., e-S-ss
 Provo
 Markham, Beatrice F., G, Provo
 Markham, LaDene, fa-Unm..
 Provo
 Marshall, Barbara, fa-F.....
 Panguitch
 Marshall, Ida Mae, ap-Unm..
 Evanston, Wyo.
 Marshall, Marian, fa-F, Vernal
 Marshall, Marie, a-So-ss, Provo
 Marshall, Robert Taylor, a-
 S-ss Provo
 Martell, Thelma Wright, ss
 Pleasant Grove
 Martin, Darrel T. a-F.....
 Imlay, Nevada
 Martin, Gene Gale, a-Unm..
 Falls City, Neb.
 Martin, Geneal, ssProvo
 Martin, Helen, ap-S....Provo
 Martin, Ruth, ap-F.....Provo
 Martindale, Bonnie B., e-F..
 Long Beach, Calif.
 Martineau, Florence, e-S-ss
 Provo
 Maruoka, Frank Mitsuo, a-
 So-ssTopaz
 Mason, Vera Lyne, ap-Sp Provo
 Mathews, Gloria, e-J, Scipio
 Matthews, Robert James, ap-
 F Evanston, Wyo.
 Maxwell, Anna V., ss, Eureka
 May, Anna Laura, a-F.....
 Baker, Ore.

Mayer, Katheryn A., ap-F..
 Salt Lake City
 Mayhew, Grace Karen, G, Provo
 McAfee, Boyd H., ss.....Lehi
 McAllister, Dale Alder fa-
 SoProvo
 McAllister, John Wells, ss..
 Manti
 McAllister, Richard W., ss..
 Blanding
 McBeth, Naomi, G.....Provo
 McBride, Marjorie Jean, fa-
 S-ss.....Columbus, S. C.
 McCall, Clifford LeGrand, a-
 UnmPayson
 McCarty, Coralie Ardis, ap-
 FAurora, Ill.
 McCormick, Billie Jean, e-
 SoWeiser, Ida.
 McCulley, Jessie Lewis, a-
 UnmMilford
 McDermott, Thomas P., a-So
 Provo
 McDonald, Afton, G....Provo
 McEwen, Gladys, a-F.....
 Kimberly, Ida.
 McEwen, Grace Irene, e-So..
 Kimberly, Ida.
 McFarland, Ramona, fa-F..
 Ogden
 McIntosh, Jean Annette, a-
 FProvo
 McKay G. Cherry, fa-Sp, Provo
 McKinlay, Bunnie M., fa-F..
 Richfield
 McKinney, Shirley Jean, fa-
 SoProvo
 McKinnon, Dorothea Jane, a-
 F.....Salt Lake City
 McMillan, Mary L., ss, Murray
 McMurray, Yvonne, c-S-ss..
 Oakley, Ida.
 McNulty, Beth Lund, fa-S..
 Mt. Pleasant
 McQueen, Jeane M., fa-F....
 Boise Ida.
 Meacham, Pearl A., ap-Sp-
 ssDuchesne
 Meakin, Barbara Jeanne, a-
 FSalt Lake City
 Meeks, Margaret Mae, ss...
 Pleasant Grove
 Melville, Donna Mae, c-Sp..
 Provo
 Mendenhall, Carma Jane, a-
 FSpringville
 Mendenhall, Legia Eliza, fa-
 FSafford, Ariz.
 Menzies, Lois, GProvo
 Mercer, Arva May, a-So, Lehi

Mercer, Marjorie, e-F.....
 Oakley, Ida.
 Meredith, Carma Fawn, fa-
 F.....American Fork
 Merrell, Dahl G., fa-J.....
 Los Angeles, Calif.
 Merrill, Mrs. M. W., ss, Provo
 Metcalf, Norma, fa-F, Gunnison
 Mickaelson, Lydia Vilate, ss
 Afton, Wyo.
 Mickelsen, Laurine e-So....
 Salt Lake City
 Millar, Phyllis J., fa-F.....
 Boise, Ida.
 Miller, Alta, ss.....Midvale
 Miller, Annabell, ss.....
 American Fork
 Miller, George Lewis Jr., G
 Provo
 Miller, LaWana, ap-F..Hyrum
 Miller, Leone, c-F..Tremonton
 Miller, Margaret B. Noble, e-
 SpProvo
 Miller, Mary Inez, a-F.....
 Detroit, Mich.
 Miller, Mildred Brown ss...
 Roosevelt
 Miller, Verla Gean, ss.....
 Salt Lake City
 Millet, Louis London, a-F Sandy
 Millet, Wm. Floyd, G....Provo
 Mills, Shirley, a-J.....Ogden
 Miner, Ellen Lila, c-F.....
 Pomona, Calif.
 Miner, Evelyn, a-So
 Philadelphia, Pa.
 Miner, Mary Jane, a-F.....
 Long Beach, Calif.
 Miner, Myrth C. e-F, Fairview
 Mitchell, Florence, c-J.....
 Safford, Ariz.
 Mitchell, L. Wm., G....Provo
 Moffitt, John Weldon, a-F..
 Provo
 Monson, Bernice, a-So
 Pleasant Grove
 Monson, LaVieve, a-J.....
 Pleasant Grove
 Moody, Beth Maurine, c-F..
 Deseret
 Moody, Inez Geneal, a-F, Delta
 Moody, Olive Ora, fa-J, Delta
 Moore, Annie, e-F.....Provo
 Moore, Jeweldine, c-F.....
 Evanston, Wyo.
 Moore, Orpha, ap-S
 Spanish Fork
 Morgan, Dorothy Draper, a-
 FProvo
 Morgan, Fern R., e-Sp Provo

- Morgan, Naomi Lucille, fa-F
 Long Beach, Calif.
 Morgan, Stensa, G.....Provo
 Morley, Stewart Alonzo, a-F
 Provo
 Morrell, Helen C., ssLyman
 Morrill, Ardith M., ap-F Myton
 Morris, Merva R., ss.....
 Salt Lake City
 Mortensen, Beth Hutchings,
 ssAmerican Fork
 Mortensen, Nona, ap-F.....
 Preston, Ida.
 Mortensen Phyllis Helen, G
 Ephraim
 Mortensen, Verna C., fa-Sp
 ssLaJara, Colo.
 Moulton, Ada, a-S.....Delta
 Mower, John F., G.....Provo
 Muir, Marion E., fa-So.....
 Kearney, N. J.
 Mullen, Barbara Ruth, a-So
 El Paso, Tex.
 Munson, Emma Colleen, c-F
 Escalante
 Murphy, Stanley Dee a-F....
 Salina
 Myers, Leah Dance, e-Sp....
 Los Angeles, Calif.
 Nakahara, Rey, a-So-ss, Topaz
 Nelson, Bette Louise, a-F....
 Wilmington, Del.
 Nelson, Blanche, ss.....Provo
 Nelson, Donald Lister, fa-F..
 Provo
 Nelson, Edna Myers, ap-So..
 Provo
 Nelson, Martha Otto, a-F....
 Salt Lake Cit
 Nelson, Mary L., ss, Cedar City
 Nelson, Roxey Lou, e-F.....
 Mt. Pleasant
 Nelson, Rulon H., ss.....
 Spanish Fork
 Nelson, Ruth Evelyn, ap-S..
 Provo
 Nerio, Masao, ap-So-ss
 McGehee' Ark.
 Newman, Catherine, c-F....
 Midvale
 Newren, Aretta, ap-So, Provo
 Newren, Lothield Young, G
 Provo
 Nicholes Elaine, c-S.....
 American Fork
 Nicholes, Elizabeth Jeanne,
 fa-FProvo
 Nicholes, Fay Evelyn, a-F..
 Lehi
 Nichols, Dorothy Gail, c-Unm
 Provo
- Nichols, Lorraine, a-So
 New Orleans, La.
 Nielsen, Ardella, e-J
 Idaho Falls, Ida.
 Nielsen, Boyd Kent, a-F, Moroni
 Nielson, Edna Claire e-So..
 Springville
 Nielsen, Emil Keith, G, Provo
 Nielsen, Faughn, e-Sp-ss....
 Spanish Fork
 Nielsen, Florence, fa-So, Salina
 Nielsen, Leland, fa-Sp, Provo
 Nielsen, Leone, a-So
 Salt Lake City
 Nielsen, Marjorie Helen, ap-S
 Idaho Falls, Ida.
 Nielsen, Vernon K., e-S-ss..
 Provo
 Nielsen, Wayne J. a-Sp, Provo
 Nielson, Wendell LeRoy, G..
 Springville
 Nilsson, Anna Q., fa-F, Monroe
 Noble, Vivienne, e-S.....
 Smithfield
 Norberg, Dorothy, ap-F, Lehi
 Norton, Isabelle Marguerite,
 a-F Provo
 Norton, Maxine Evon, ap-So
 Provo
 Nugink, Margaret, ap-So, Provo
 Nuttall, Ora Lee Phillips, ap-
 F Provo
 Oaks, Carol, ssProvo
 Oberg, Verna, c-F,..Santquin
 Ockey, Blanche, c-F....Nephil
 Ogden, Dorothy, fa-F, Richfield
 Ogden, Sadie, ss.....Richfield
 Ohai, Reuben Miller, G.....
 Kapaa, Kauai, T. H.
 Ohran, Gloda Norlyene, fa-F
 American Fork
 Olcott, Georgean, e-F,..Sevier
 Oldroyd, Gloria, ap-Unm, Provo
 Oldroyd, Una, ssVenice
 Oliphant, Doris Raphiel, e-
 SoSeattle, Wash.
 Oliphant, Margaret, e-F....
 Seattle, Wash.
 Oliver Carma Ruth Andrasen,
 fa-S.....St. Anthony, Ida.
 Olpin, Barbara Ann, fa-So..
 Columbus, Ohio
 Olpin, Helen Rae, e-J.....
 Columbus, O.
 Olpin, Kathryn, fa-Unm....
 Pleasant Grove
 Olsen, Billye Virginia, fa-F
 Mt. Pleasant
 Olsen, Carolyn, fa-So
 LaCanada., Calif.

Olsen, Harlan Dephlin, a-Unm
 Provo
 Olsen, LaRee, c-F.....
 Pleasant Grove
 Olsen, Lee J., c-So, Springville
 Olson, Lona Faun, fa-F.....
 Fairview
 Olson, Marie, c-F.....Richmond
 Olsen, Marion J., G.....Provo
 Olsen, Nial June, fa-F, Provo
 Olsen, Ray Richard, a-F..
 Rigby, Ida.
 Olsen, Roy LaVerl a-F.....
 Rigby, Ida.
 Olson, Verda, a-J Salt Lake City
 Orgill, Douglas Harold, ap-J
 Kemmerer, Wyo.
 O'Rourke, Mae, c-F.....Eureka
 Orr, Robert Wesley, ss.....
 Pocatello, Ida.
 Osguthorpe, Mary Osma, a-F
 Salt Lake City
 Osmond, Mary Irene, ss, Provo
 Ostler, Mary Lou, ap-F.....
 Boise, Ida.
 Ottley, Earl Henry, fa-So.....
 Midvale
 Ottosen, Melba, a-F.....Sandy
 Ovard, Beth, fa-So.....
 American Fork
 Overlade, Maxine, a-Unm, Provo
 Owens, Marian, a-J.....Provo
 Pace, Donna, ap-S-ss.....
 Cedar City
 Pace, Patricia Ann, fa-So.....
 Delta
 Pack, DeVar Crockett a-F..
 Burbank, Calif.
 Pack, LaDeane, ap-F.....
 Burbank, Calif.
 Pack, Lucile Bernice, fa-J..
 Salt Lake City
 Page, Colleen, c-F.....Provo
 Page, Donna B., ap-So, Kamas
 Page, Ina, ss...Pleasant Grove
 Page, LaJuana, e-F...Riverton
 Page, Lennie, ap-F...Parowan
 Palmer, Betty, ap-F, Blanding
 Parker, Alice, ss.....
 American Fork
 Parker, Florence, ap-F, Hooper
 Parker, Margaret Mae, c-F..
 Joseph
 Parker, Reed J., a-Sp.....
 Salt Lake City
 Parkinson, Ella Jean, c-S-ss
 Milford
 Parkinson, Genevieve, e-So-
 ss.....Milford
 Partridge, Beth, c-J..Fillmore
 Patten, Deon, a-F.....Orem

Patten, Herb Terry, a-F, Provo
 Patton, M. iVrginia, a-So..
 Charleston, West Va.
 Paul, Beth, ap-S.....Ogden
 Paulitz, Dorothy, c-Sp, Provo
 Paulson, Paul W., ss....Provo
 Paulsen Vida Rae, fa-F.....
 Copperton, Bingham Canyon
 Pawlowski, J. Frederick, a-F
 American Fork
 Paxman, Doressa, fa-S Provo
 Paxman, Lucille, a-Unm, Provo
 Paxman, Mary Elaine, e-F..
 Nephi
 Pay, Clarence H.....ss, Nephi
 Payne, Cherril H., e-F, Monroe
 Payne, Dean Wilford, ss.....
 Seattle, Wash.
 Payne, Ines Eckersley, a-J..
 Payson
 Payne, Kay Ellsworth, ss..
 Seattle, Wash.
 Peacock, Elaine, e-So.....
 Orangeville
 Pearce, Wesley, G.....
 Salt Lake City
 Pearson, Betty, a-So.....Provo
 Peay, Eileen J., fa-Sp, Provo
 Peay, Walter Boyd a-Unm..
 Provo
 Penman, Melba Kaye, fa-F..
 Hooper
 Perez, Fidel Delfine, a-Unm
 Durango, Colo.
 Perkins, Muriel, fa-F.....
 Overton, Nev.
 Perkins, Vera, ss....St. George
 Perkins, Waldo C., a-F.....
 Overton, Nev.
 Perry, Ivan, ss.....Vernal
 Peterson, Alton H., ss, Provo
 Peterson Anna e-So Blanding
 Peterson, Dale Andrew, a-F
 Provo
 Peterson, Elizabeth, ss, Provo
 Petersen, Elva Gae, fa-F....
 Brigham City
 Peterson, Estella Leone, fa-
 Sp.....Sanford, Colo.
 Peterson, George Dewey, Jr.
 a-Unm.....Provo
 Petersen, Janis Marie, fa-F
 Portland, Ore.
 Petersen, Laura, e-F..Oakley
 Petersen, Lola Jean, fa-J..
 Rexburg, Ida.
 Peterson, Margaret Bowen,
 fa-Sp-ss.....Provo
 Petersen, Melvin Joseph, a-F
 Joseph City, Ariz.

- Peterson, Stanley, a-Sp.....
 Spanish Fork
 Pettigrew, David Alma, fa-F.....
 Salt Lake City
 Petty, Marjorie, e-So....Provo
 Plaughter, Jim Weldon, ss....
 American Fork
 ..Phillips, Lorinda, e-Sp, Provo
 Phillips, Margaret, fa-F....
 Tetonia, Ida.
 Phillips, Marie, fa-So, ..Provo
 Phillips, Phyllis Booth, a-So
 Orem
 Pierce, Mary Elizabeth, fa-F
 El Paso, Texas
 Pitt, Colleen, a-F,
 Salt Lake City
 Potts, Ila Jean, a-F
 Salt Lake City
 Poulson, Elaine, fa-F Duchesne
 Poulsen, Eva, G....Springville
 Powell, Reed Madsen, c-J, Provo
 Pratt, Ann, fa-J, Gardena, Cal.
 Pratt, Lucile, a-F, Spanish Fork
 Preece Doris Fern, fa-Unm
 Vernal
 Preston, Merrill R., c-So....
 American Fork
 Price, Eva, ssVernal
 Price, John DeMay, a-F Wales
 Price, LuJean, a-F.....Ogden
 Friday, Margaret, fa-So....
 American Fork
 Prince, Lillian Terry, fa-Sp
 Orem
 Pringle, George Earnest, a-J
 Provo
 Prisby, LaVee, e-F.....Joseph
 Probst, Mae e-Sp
 Salt Lake City
 Pulsipher, William L., a-So
 Mesquite, Nev.
 Purrington, Wealthy, a-S..
 Ogden
 Raile, Carol B., fa-Sp, Provo
 Rambeau, Beth, c-J....Provo
 Rambeau, Jean M., fa-Sp, Provo
 Ramey, Henry Frederick, e-
 S-ssRiggins, Ida.
 Ramsay Helen Clarke, ss....
 American Fork
 Randall, Karleen, a-So, Ogden
 Randall, Melba, e-F
 Joseph City, Ariz.
 Ransbottam, Adele, e-S.....
 Preston, Ida.
 Raphael, Ouida, e-So.....
 Compti, La.
 Rasband, E. Janett, e-J.....
 Heber City
 Rasmussen, Ellis T., ss.....
 Richmond
 Rasmussen, Nelda N., fa-Sp
 Provo
 Rasmusson, Roland, c-F, Provo
 Rasmuson, Virginia, fa-Unm
 Provo
 Ravsten, Janell, fa-F.....
 Paul, Idaho
 Rawle, Carol Millet, e-F....
 Morgan
 Rawle, May Millet, ss, Morgan
 Reber, Donald, a-So-ss.....
 Littlefield, Ariz.
 Redd, Ruth, ap-J, Salt Lake City
 Reese, Eldon Layton, G....
 Springville
 Reese, Jean Carolyn, fa-So..
 Provo
 Reeve, Rhea Dixon, fa-Sp-ss
 Provo
 Reid, Lawrence Elwin, ss....
 Provo
 Reusser, Mildred, G....Provo
 Reynolds, Henry Taylor, c-
 So Springville
 Reynolds, Norma, fa-So....
 Hansen, Idaho
 Rhodes, Deaun Cossette, c-F
 Provo
 Rice, Eleanor, fa-So.....
 Denver, Colo.
 Rice, Val Deane, a-So.....
 Maywood, Calif.
 Rich, Stella P., ssProvo
 Richan, Mrs. Faye Clayton,
 fa-So Provo
 Richards, Kathryn Ann, e-
 S-ss Malad, Idaho
 Richards, Lucille, c-So.....
 American Fork
 Richardson, Annie, ap-So-ss
 Provo
 Richardson, Beth, G....Provo
 Richardson, Iris, c-S....Nephi
 Richardson, Wanda, c-F, Provo
 Richins, LaDene, e-So.....
 Burley, Ida.
 Rickenbach, Virginia, a-So..
 Richfield
 Ricks, Alice, a-Sp.....Provo
 Ricks, Wanda Marine, ap-So
 Provo
 Ricks, Welby Willis, a-J....
 Provo
 Riddle, Chauncey C., a-So-ss
 Las Vegas Nev.
 Rigby, Cleston H., ss, Provo
 Rigby, Florence, G
 Provo

- Rigby, J. Keith, e-F-ss Fairview
 Riggs, Evelyn, e-So, Gunnison
 Riggs, Thalia, e-J.....Hatch
 Roberts, Bee, ss, Salt Lake City
 Roberts, Elda O., ss.....Provo
 Roberts Linden J., a-Unm...
 Annabella
 Roberts, Margaret L., fa-Sp
 ss Spanish Fork
 Roberts, Robert Mac, a-F, Price
 Robertson, Alice Marian, a-F
 Provo
 Robertson, Hazel M., a-Sp...
 Provo
 Robertson, Norma, a-F, Provo
 Robins, Harold David, c-S..
 Provo
 Robins, Roland Kenith, a-So-
 ss Delta
 Robinson, Bettye, fa-F.....
 American Fork
 Robinson, Dorothy, fa-F....
 Boise, Idaho
 Robinson, Jennie Jane, fa-F..
 El Paso, Texas
 Robinson, Marjorie Alberta,
 fa-FEl Paso, Tex.
 Robinson, Phileon B., c-S-ss
 Boise, Idaho
 Robison, Arnold Edgar, ss..
 Provo
 Robison, Clyde Jesse, a-F..
 Los Angeles, Calif.
 Robison, Lois Pearl, ap-So..
 Baker, Nevada
 Robison, Marie S., fa-Sp, Provo
 Robson, Iris, ap-So....Trenton
 Rogers, Lillian, fa-F....Ogden
 Rohbock, Louise, fa-F..Orem
 Rollo, Dorothy Louise, a-F..
 Glendale, Calif.
 Romney, Cecile, a-J....Payson
 Romney, Letha, fa-So..Provo
 Romney, Maurine, a-F, Payson
 Romney, Shirley, ap-So...
 Tulsa, Okla.
 Roper, Betty Jane, ap-So...
 Oak City
 Roper, Margaret Walker, ss
 Oak City
 Roper, Voit J., a-So....Vernal
 Roskelley, Mary Lovendale,
 ap-J ..San Luis Obispo, Cal.
 Roundy, Golda, c-S,
 Palmyra, N. Y.
 Roundy, Iona, ap-So....Provo
 Rowan, Colleen, a-So....Provo
 Rowan, Gaylon Bennett, ss
 Provo
 Rowland, Hannah, a-Sp.....
 Springville
 Rowley, Alice G., c-Sp, Provo
 Rowley, Donna B. ss, Provo
 Roylance, Lucy, a-Sp.....
 Springville
 Rudd, Vilate, a-F.....Ogden
 Ruoff, Beverly June, c-F....
 Sioux City, Iowa
 Russell, Ada Jean, fa-F, Ogden
 Rust, Burton O., ss, Glendale
 Rutter, Wm. J., a-F Malad Ida.
 Ryl, Eden, fa-J.....Provo
 Ryskamp, Edna Estella, fa-F
 Detroit, Mich.
 Salisbury, Ann, e-S.....Nephi
 Samil, Fathollah, ap-So-ss...
 Teheran, Iran
 Sandberg, Lucille, fa-S.....
 Sander, Elizabeth, a-S-ss....
 Sanderson, Aleen, ap-F, Draper
 Sanderson, Carol fa-F, Draper
 Sandstrom, Alonzo A., ss...
 Eureka
 Sandstrom, Annette, c-So, Orem
 Sandstrom, Cecil Colleen, ss
 Eureka
 Sandstrom, Jeanne, ap-J, Orem
 Sanford, Frank Dee, c-So....
 Springville
 Sanford, Junella, fa-so.....
 r Boise, Ida.
 Sanford, Shirley, ap-F...Delta
 Sanford, Shirley Louise, a-F
 Washington, D. C.
 Sano, Hisanori, a-F.....Topaz
 Sano, Yukio Jack, c-So, Topaz
 Sato, Bob, a-Unm.....Orem
 Sawyers, Mary Olive, fa-F...
 Richfield
 Schaefer, Carolyn Dolores,
 a-F.....Kenosha, Wisc.
 Scherer, Marjorie, c-F..Provo
 Schmutz, LaRue Startup, a-
 F Provo
 Schwantes, Gloria Louise, c-
 FDouglas, Ariz.
 Schwantes, Gloria Louise, c-
 F Douglas, Ariz.
 Schwartz, Mary Roylance, a-
 Sp Springville
 Schwartz, Ruby, c-F Dayton, O.
 Scoriah, Vivienne, a-F
Calgary, Alberta, Canada
 Scott, Bonnie Jeane, a-Sp...
 Provo
 Scott, May Johnson, fa-Sp..
 Provo

- Sebree, Bettye Louise, ap-F
..... Caldwell, Ida.
Sessions, Sterling David, a-So
..... Provo
Sharp, Betty, fa-Sp....Provo
Sharp, Stephen Dale Jones,
fa-F Rigby, Idaho
Shaw, Frank Williams, ss, Lehi
Shaw, Mildred Jane, ap-F....
..... Nampa, Idaho
Shelby, David E., ss
..... Salt Lake City
Shepherd, Edith Alice, ap-F
Cardston, Alberta, Canada
Shepherd, Lois Helen, ap-So
..... Alpine
Shepherd, Virginia Arline...
fa-F Mesa, Arizona
Sherry, Barbara Adele, c-So
..... Provo
Shields, Alice Zelda, ap-F...
..... Cushing, Okla.
Shields, Leland Grant, fa-So
..... Tooele
Shiozawa, Helen Shiratori,
ap-S Provo
Shiratori, Miche Michiko, ap-
F Rexburg, Ida.
Shirley, Hazel Mae fa-Sp...
..... Rexburg, Ida.
Simmons, Edith, c-F...Payson
Simmons, Gloria, e-J....Provo
Simmons, Lucile, a-F....Manti
Simmons, Marilyn, e-So, Provo
Simons, Florence, ap-J Salem
Sinclair, Marjorie Dean, e-So
..... Montesano, Wash.
Singleton, Veloy, fa-F...Provo
Skinner, David Grant, ap-J
..... Safford, Arizona
Skinner, Mary Jean, a-S..Orem
Skoro Mary J., c-J.....
..... Twin Falls, Idaho
Skouson, Dorothy, c-F.....
..... Buckeye, Ariz.
..Slack, Jean, fa-SpProvo
Slade Fay Brady, ss....Provo
Slade, Victor Arnold, a-F-ss
..... Provo
Smart, Mary, fa-So
..... Portland, Oregon
Smith, Ada..., G ...Springville
Smith, Albert Byrl, a-F, Milford
Smith, Carol, a-F.....
..... Pleasant Grove
Smith, Donna Gene, ap-So Prov^o
Smith, Edna F., ss
Greenwich, Nova Scotia, Can.
Smith, Edna L., fa-F.....Lehi
- Smith, Eva Jane, c-F.....
..... Springville
Smith, Jeanne Adeline, c-So
..... Idaho Falls, Ida.
Smith, Julian C., fa-F.....
..... Salt Lake City
Smith, June, fa-F...Bountiful
Smith, Rayola Mae, a-F.....
..... Idaho Falls Ida.
Smith, Ruel C., ss.....
..... Glenber City, Ariz.
Smithson, Delga, c-So
..... Phoneix, Ariz.
Smithson, Ida Allen, e-Sp....
..... Fillmore
Smithson, Rulon Nephi, fa-F
..... Neola
Snarr, Thelma, ssMurray
Snell, Olga Marie, ap-So....
..... Westport, Conn.
Snider, Eloise Mae, ap-So...
..... Delta Colo.
Snow, Dorothy, a-S.....
..... Santa Monica, Calif.
Snow, Hattie T., c-Sp-ss, Provo
Snow, Oval L., e-Sp-ss, Provo
Snow, Pearl E., ss.....Provo
Snow, Perry E., ss.....Ferron
Snow, Rulon Ellsworth, a-J
..... St. George
Snow, Shipley McGregor, a-Sp
..... Provo
Snow Wanda McGregor, G..
..... Provo
Soda, Chicko, ap-So.....Roy
Soderquist, Oscar Eugene, ss
..... Delta
Sorenson, Mercedes Janice, a-
So Richfield
Sorenson, Velora Ruth, a-F
..... Draper
Spears, Vera a-Sp.....Provo
Spencer, Alice Clayton, ss..
..... Payson
Spencer, Helen Jean, fa-F..
..... Fillmore
Spencer, Ida Mae, e-So-ss..
..... Evanston, Wyo.
Spencer, Lorraine Helen, c-
F Ogden
Spendlove, Vaughn Denzel,
ap-F-ss Provo
Sperry, Claire Elaine, a-So-
ss Provo
Sperry, Mabel F., ss....Nephi
Spicer, Carol, e-So.....
..... Rock Springs, Wyo.
Spratley, Joan, fa-F ..Magna
Squire, LaVon Petra, e-F...
..... Mt. Pleasant

Stagg, Bonnie Mae, c-F, Vernal
 Stagg, Sally Mae, c-F Vernal
 Staheli, Emma Rene, c-F....
 Enterprise
 Staheli, Harvey R., G...Provo
 Stahle, Melba, e-S-ss Park City
 Stander, Arya Kathryn fa-F
 Blackfoot, Ida.
 Stanger, Orvilla Virgie, c-F
!, Richmond, Calif.
 Stanley, Elena H., ss...Mona
 Stark, Anna E., ss Spanish Fork
 Stayner, Sara, c-F, Malad, Ida.
 Steckle, Ward Allen, e-Sp-ss
Calgary, Alberta, Canada
 Stenquist, Lee B., a-So.....
 Tremonton
 Stephens, Francis Clark, a-F
 Provo
 Stephens, Nell C., e-J-ss, Provo
 Stephenson, Garth A., a-F..
 Wendell, Ida.
 Stephenson, Ruth Brunson, ss
 Lehi
 Stevens, Betty Lue, fa-So....
 Hurricane
 Stevens, Nelda, fa-F.....
 El Paso, Tex.
 Stevenson, Marilyn Doris, fa-
 So Salt Lake City
 Stewart, Karma fa-F.....
 Spanish Fork
 Stewart, Vonda Harris, G, Provo
 Stewart, Zona Elvery, G, fa-
 Unm Calgary, Alberta, Can.
 Stimpson, Edith, G.....Provo
 Stinson, Thelma, ap-Sp.....
 Phoenix, Ariz.
 Stoker, Florence, ss.....
 Spanish Fork
 Stokes, Eva, fa-F.....
 Twin Falls, Ida.
 Stokes, Orpha, fa-F.....
 Twin Falls, Ida
 Stone, Dal M., e-So.....Lehi
 Storrs, Jennie Grant, e-J-ss
 Provo
 Stout, Dorothy Mae, ap-F, Moab
 Stowell, Elaine, fa-S-ss.....
 Rexburg, Idaho
 Strate, Fred C., G.....Provo
 Strate, Ruth Watson, G, Provo
 Stratford, Betty Lucille, c-F
 Portland, Ore.
 Straw, Norma Nell, e-F.....
 Springville
 Strawn, Martha May, fa-Sp..
 Provo
 Strickland, Betty, c-F.....
 Norfolk, Virginia

Stringham, Beatrice, ss, Vernal
 Stringham, Janet Marcia, a-F
 Pasco, Wash.
 Strong, Josephine M., ss, Provo
 Strong, Marvin H., ss.....
 Salt Lake City
 Stubbs, Kenneth Sidney, ss..
 Provo
 Stubbs, Nila, fa-So.....Provo
 Stucki, Anna, c-S.....
 Rexburg, Ida.
 Stucki, Franklin Stewart, c-
 S Delta
 Stueler, Elna Lorraine, c-J
 Provo
 Sturgill, Lois Marie, fa-F...
 Kimberly, Ida.
 Styler, Ila, ssOasis
 Sudweeks, Lorraine, e-F....
 Kimberly, Ida.
 Sullivan, Eurilda Louise, c-F
 Santaquin
 Sullivan, Nola Eloise, fa-So
 Provo
 Sumsion, Kathryn Calder, ss
 Springville
 Sundwall, Jessie Edna, ss...
 Fairview
 Sutton, Jacqueline, fa-J....
 Grantsville
 Sutton, Marjorie, fa-F.....
 Grantsville
 Sutton, Thelma Delilah, e-F
 Grantsville
 Swain, Ida Felice, fa-Umn-
 ssPhoneix, Ariz.
 Swainston, Rosa Mae, c-So...
 Preston, Ida.
 Swalberg, Joy M., fa-S-ss....
 Spanish Fork
 Swalberg, Venna W., fa-Sp..
 Orem
 Swapp, Burns J., ap-F Kanab
 Swapp, Mary Huff, G...Provo
 Swenson, LaRee, ap-F.....
 Spanish Fork
 Swenson,, Martha T., ss....
 Spanish Fork
 Sylvester, Gwen, fa-S-ss....
 Hurricane
 Syphus, Eleanor Deane, ap-
 Unm St. George
 Takata, Paul Hisashi, a-F...
 Topz
 Tanamachi, Kaoru, a-F, Topaz
 Tangren, Joy H., a-So, Provo
 Tanner, Arthur McLaughlin,
 a-F Provo
 Tanner, Carolyn Mae, a-F..
 Ogden
 Tanner, Marilyn, ap-So, Provo

- Tanner, Wilmer W., G..Provo
 Tanner, Zola, fa-F.....
 Edmonton, Alberta, Canada
 Taylor, Afton Lenora fa-F..
 Provo
 Taylor, Barbara, a-S
 American Fork
 Taylor, Blaine M., a-F.....
 Preston, Ida.
 Taylor, Cynthia Lyman, ss..
 Lapoint
 Taylor, Deanne Parkinson, a-
 F Provo
 Taylor, Dorothy, c-F....Provo
 Taylor, Dorothy, fa-So.....
 Bountiful
 Taylor, Gloria Mae, a-Unm..
 Provo
 Taylor, Hal Loren, e-F, Provo
 Taylor, Iris, a-So-ss....Provo
 Taylor, Jennie M., G Monroe
 Taylor, Noel M., a-Sp Provo
 Taylor, Rose, a-Sp.....Provo
 Taylor, Rose Parkinson, ap-J
 Provo
 Taylor, Shirley, a-F.....
 Clackamas, Ore.
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 Thompson, John Harmon, a-
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 Thompson, Marjorie Zell, fa-
 F Lark
 Thompson, Norma Knight, ss
 Provo
 Thompson, Paul Stephenson,
 a-F Provo
 Thompson, Viola, e-So Provo
 Thomson, Jane Louise, ap-F
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 Thornton, Mrs. J. W., c-Sp..
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 Sp-ss Provo
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 Wagstaff, LuDeane, fa-F....
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 Wakefield, Emma H., fa-Sp..
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 Walston, Henry C., a-F Salem
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 Buhl, Ida.
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 Whipple, Eunice Elaine, a-F
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 Whiting, Joyce, a-F, Mapleton
 Whiting, Ray S., ap-S, Mapleton
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 Williams, Jean, c-F, Grantsville
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 Williams, Wayne Deloye, G-
 ss Fountain Green
 Wills, Catherine Dougall, ss
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 Wilmott, Alzada, G-ss.....
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 Wilson, Bonnie Mary, a-So..
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 Wilson, Gertrude Elizabeth,
 a-So Kirtland, N. M.
 Wilson, Ila Sarah, a-F.....
 Scofield
 Wilson, Margaret, e-F, Midway
 Wilson, Margaret, a-So, Ogden
 Wilson, Miriam Joyce, e-F..
 Centerville
 Wilson, Ray, ap-So....Provo
 Wilson, Ruth, ap-S....Payson
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 Wilson, Thella, ss ..Roosevelt
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 J-ss Provo
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 Wood, Elaine, a-So...Fillmore
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 fa-F.....Boise, Idaho
 Wood, Norma, fa-Sp....Provo
 Woodbury, Virginia, a-J....
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 Woodger, Edward Winston,
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 Woodland, Vera Bagley, G..
 Provo
 Woodward, Jean Cherizade
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 Woolf, Katherine Kirk, e-Sp-
 ss Provo
 Woolf, Lois, ap-SProvo
 Woolf, Pearl, ssProvo
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 Workman, Lillian A., ss.....
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 Worthen, Howard George, a-
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 Wright, Richard D., a-F....
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 Wright, Robert Ralph, a-F
 Murray
 Wunderli, Lida Florice, a-
 SoSalt Lake City
 Yamada, Edward T., ap-So-
 ss Honolulu, Hawaii

Yamate, David Hisato, a-F..	Young, Miriam, fa-J.....
..... Topaz American Fork
Yamate, Lorraine S., fa-J...	Yui, Naoyuki Henry, a-So..
..... Topaz Topaz
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..... Spanish Fork Provo
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..... Provo	Zieve, Betty, fa-So.... Kamas
Young, Louise, a-F.....Draper	Zimmerman, Margaret Merle,
Young, Lucile B., ss....Provo	fa-F.... Chambersburg, Pa.
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Juniors	138	
Sophomores	262	
Freshmen	665	
Unmatriculated	51	
Specials	183	
		<hr/>
		1508

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Graduates	118	
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		<hr/>

Correspondence & Extension	1892	1892
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		<hr/>
		4398
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